# DRAFT RECORD OF DECISION for the TransWest Express Transmission Project

U.S. Department of Agriculture Forest Service Intermountain Region Manti-La Sal National Forest Uinta-Wasatch-Cache National Forest Juab, Sanpete, and Utah Counties, Utah



# **List of Acronyms**

AC alternating current

ACHP Advisory Council on Historic Preservation

ALMPA Approved Land Management Plan Amendment

APLIC Avian Power Line Interaction Committee

APS Arizona Public Service

ARPA Archaeological Resources Protection Act

BA Biological Assessment
BE Biological Evaluation
BIA Bureau of Indian Affairs

BLM Bureau of Land Management
BMP Best Management Practice

BRTG Biological Resources Task Group

CAA Clean Air Act

CFR Code of Federal Regulations

CIC Compliance Inspection Contractor

CUP Central Utah Project
CWA Clean Water Act
DC direct current

DOI Department of the Interior

EGS Energy Gateway South Project
EIS Environmental Impact Statement
ESA Endangered Species Act of 1973

EHV extra-high voltage
EO Executive Order

FLPMA Federal Land Policy and Management Act of 1976

FO Field Office

FSH Forest Service Handbook FSM Forest Service Manual

GMR General Big-game Winter Range (management area)

HEA Habitat Equivalency Analysis

HPTP Historic Properties Treatment Plan

I- Interstate-

IA interim agreement
ID Team Interdisciplinary Team

IOP Interagency Operating Procedure

IPP Intermountain Power Project
IRA Inventoried Roadless Area

kV kilovolt

LRMP Land and Resource Management Plan

MW megawatt

MOU Memorandum of Understanding

NAAQS National Ambient Air Quality Standards
NEPA National Environmental Policy Act of 1969

NFS National Forest System (land)

NHPA National Historic Preservation Act of 1966

NFMA National Forest Management Act

NOA Notice of Availability

NOI Notice of Intent

NPS National Park Service

NRHP National Register of Historic Places

NTP Notice to Proceed

PA Programmatic Agreement

POD Plan of Development

PRPA Paleontological Resources Preservation Act

RFFA reasonably foreseeable future actions

ROD Record of Decision

ROW right-of-way
SH State Highway

SHPO State Historic Preservation Officer

SIO Scenic Integrity Objective

SUP Special Use Permit

TAC The Anschutz Corporation
TransWest TransWest Express LLC

TWE Project TransWest Express Transmission Project

UDWR Utah Division of Wildlife Resources

URUD Unroaded/Undeveloped Area

USC United States Code

U.S. United States

USDA U.S. Department of Agriculture

USEPA U.S. Environmental Protection Agency

USFWS U.S. Fish and Wildlife Service

USFS U.S. Forest Service

VQO Visual Quality Objective

VRM visual resource management

Western Area Power Administration
WIA Wyoming Infrastructure Authority

WEEC Western Electricity Coordinating Council

WWEC West-wide Energy Corridor

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# 1.0 Decisions and Acknowledgements

# 1.1 Decision

I, Chad E. Hudson, Deputy Forest Supervisor for the Uinta-Wasatch-Cache National Forest, have been delegated by the Regional Forester as the lead Authorized Officer for the TransWest Express Transmission Project (TWE Project). As the lead Authorized Officer, I have been granted the authority to execute the decision resulting from the TransWest Express Transmission Project EIS for all potentially affected National Forests.

#### 1.1.1 Decisions to be Made

The decisions I must make for the U.S. Forest Service (USFS) include the following: 1) whether to approve use of National Forest System (NFS) land by the applicant; 2) the choice of a Selected Alternative; 3) under what terms and conditions a Special Use Permit (SUP) should include if use of NFS land is approved; and 4) the need to amend the Land and Resource Management Plans (LRMPs) relying on the National Forest Management Act (NFMA). Detailed descriptions of these four parts of the Decision are provided in this section, followed by supporting information.

# 1.1.2 Special Use Authorization

It is my decision to approve the proposed use and subsequently issue a Special Use Authorization for the Selected Alternative. As a requirement of the standard terms of the SUP authorization and the Record of Decision (ROD), TransWest Express LLC (TransWest or applicant) will provide an environmental compliance inspection contractor (CIC), which will be approved by the Bureau of Land Management (BLM) and the USFS on their NFS land to represent these agencies during the construction and reclamation phases of the Project. The CIC will report directly to each federal Project Manager and will be authorized to enforce the stipulations of the federal grants and authorizations. The primary role and responsibility of the CIC is to ensure compliance with all terms, conditions, and regulatory requirements. Additionally, the CIC shall follow the Environmental Compliance Plan, as described in Appendix G of the Plan of Development (POD). TransWest also will be responsible for monitoring the reclamation of the transmission line, temporary access routes, and ancillary facilities, as described in Appendix Q (Reclamation Plan) and Appendix N (Noxious Weed Management Plan) of the POD. As noted in **Appendix C**, **Table C-1** in this POD, these Plans will be revised to specifically address the Selected Alternative. The POD is attached as **Appendix B** of this ROD.

# 1.1.3 Selected Alternative

Based on my review of the impact analysis in the Draft Environmental Impact Statement (Draft EIS, BLM 2013) and the Final EIS (BLM 2015), including public comments received on the Draft EIS, I have decided to approve the SUP in response to TransWest's request for the 250-foot powerline Right-of-Way (ROW) on NFS lands under USFS jurisdiction on the Manti-La Sal National Forest and the Uinta Planning Area of the Uinta-Wasatch-Cache National Forest¹ for the construction, operation, and maintenance of a 600-kilovolt (kV) transmission line following Alternative II-G, the portion of the Agency Preferred Alternative that crosses NFS lands. In addition, I approve the use of NFS lands under USFS jurisdiction on the Manti-La Sal National Forest as a possible location for the Project to allow for the landowner proposed Salt Creek Canyon Reroute Micro-siting Option where it would deviate from the Agency Preferred Alternative. Either the Final EIS Agency Preferred Alternative or the Salt Creek Canyon Reroute Micro-siting Option could be implemented under this decision, based on the outcome of

TransWest Express Transmission Project EIS Draft Record of Decision

<sup>&</sup>lt;sup>1</sup> In March 2008, the Uinta National Forest and the Wasatch-Cache National Forest were combined into one administrative unit (Uinta-Wasatch-Cache National Forest). Each of these forests continues to operate under individual forest plans approved in 2003.

Canyon Reroute Micro-siting Option could be implemented under this decision, based on the outcome of negotiations between TransWest, Utah Department of Wildlife Resources, and the private landowners. If the Final EIS Agency Preferred Alternative (Alternative II-G) is chosen instead of the reroute, then the impacts to USFS lands as described in this ROD would be less than the reroute.

The Agency Preferred Alternative will cross two portions of the Uinta National Forest Planning Area for a total corridor length of approximately 18 miles. The Agency Preferred Alternative and the Salt Creek Canyon Reroute Micro-siting Option also will cross three portions of the Manti-La Sal National Forest, with a total corridor length of approximately 1 mile. The Agency Preferred Alternative with the Salt Creek Canyon Reroute Micro-siting Option is now referred to as the Selected Alternative. The Selected Alternative also includes temporary access routes to be used for construction of the Project. The lengths of the temporary access routes for the portions of the Project on the Uinta National Forest Planning Area and Manti-La Sal National Forest were estimated through indicative modeling in the EIS to be up to approximately 43 miles and 2 miles, respectively. This decision does not authorize creation of new permanent access routes on NFS lands for construction, operation and maintenance of the Project. Final determination of locations and mileage of the temporary access routes will be determined though coordination with TransWest and the USFS implementation team and line officer prior to authorization of construction activities. Legal descriptions for the portions of the Manti-La Sal National Forest and Uinta National Forest Planning Area are provided in **Appendix D** of this ROD. Maps of the Selected Alternative are provided in **Appendix E** of this ROD.

This decision affects only those lands in the Project area administered by the USFS for the Manti-La Sal National Forest and Uinta National Forest Planning Area. The BLM has issued a separate decision on whether or not to grant a SUP for lands under its jurisdiction, based on analyses contained in the EIS.

The rationale for this decision is that proposed Project facilities on NFS lands can be constructed and operated without causing adverse impacts of concern to environmental resources and minimal conflicts with LRMP standards and guidelines. Furthermore, the alternative selected in this decision provides for a route that is congruent with the lead agencies' decision, allowing for a feasible Project that connects across all lands. The basis for this rationale is that the proposed Project would implement design features and follow best management practices (BMPs) and additional mitigation to avoid or reduce impacts to environmental resources. The protection measures or terms and conditions are summarized in Section 1.1.4.

Identification of the Selected Alternative involves some difficult judgments regarding tradeoffs between different natural and cultural impacts and values. This becomes more complex as the USFS considers the impacts to resources outside of NFS lands and beyond its mandated management jurisdiction. Based on a comparison of impact parameters involving ROW miles, road miles, and total disturbance on NFS lands, Alternative II-D would result in the lowest level of impacts to natural and cultural resources on NFS lands (see Chapter 6.0). The Selected Alternative ranked in the mid-range of potential impacts to NFS lands based on the impact parameters. However, NFS lands comprise less than 6 percent of lands crossed by the entire Project. Accordingly, the USFS supports the BLM and Western in their identification of the Selected Alternative.

This decision meets the USFS purpose of responding to TransWest's application to construct, operate, maintain, and decommission<sup>2</sup> a transmission line on federal lands. The decision also supports the need for this action to fulfill the USFS responsibility under Federal Land Policy and Management Act (FLPMA), the NFMA, and USFS Special Use Authorization regulations 36 Code of Federal Regulations (CFR) 251 Subpart B – Land uses and its implementing policies in Forest Service Manual (FSM) 2700, and

Although analyzed as part of the proposed action, decommissioning at the end of the Project life would likely be subject to additional National Environmental Policy Act of 1969 (NEPA) review because of changed circumstances.

Forest Service Handbook (FSH) 2709.11, and related environmental policy direction in FSH 1900 and FSH 1900.

#### 1.1.4 Terms and Conditions

# 1.1.4.1 National Forest System Managed Lands

Environmental protection measures will be implemented to minimize effects to sensitive environmental resources. These measures will provide long-term monitoring, and adaptive management elements of resource-specific mitigation plans. The terms and conditions of this decision include all applicable environmental protection measures considered in the Final EIS, including:

- the Applicant-committed environmental measures,
- the applicable USFS LRMP standards and guidelines,
- the West-wide Energy Corridor (WWEC) Final Programmatic EIS BMPs and Interagency Operating Procedures (IOPs), and
- all avoidance, minimization, and mitigation measures developed through the NEPA process (including ESA Section 7 and NHPA Section 106 consultations).

The federal land management agencies are responsible for ensuring compliance with all adopted mitigation measures applicable to lands under their jurisdiction, as described in 40 CFR 1505.2(c). Additionally, the Applicant must post a financial security with the BLM, as lead federal agency, in an amount sufficient to cover all post-fieldwork costs associated with implementing the mitigation activities, and for reclamation requirements and activities. Although the bond is held by the BLM, it would be calculated to provide protection to resources on both BLM and NFS lands. During construction of the Project, the BLM and the USFS will engage a third-party Compliance Inspection Contractor (CIC) to act on behalf of the federal land management agencies to provide construction oversight and monitor compliance with the terms and conditions of the federal grants and authorizations. TransWest will provide funding for the CIC, with contractor approval and activity oversight by the BLM and USFS.

The Applicant has committed to measures that will avoid or minimize the environmental impacts. These measures are listed in Section 8.3.1 of the POD (**Appendix B** to this ROD), and are detailed in the numerous plans appended to the POD. Appendix G of the POD describes the Framework Environmental Compliance and Monitoring Plan, which provides an overview of how TransWest will manage compliance with all laws, regulations, and agreements related to the TWE Project. This Plan may be updated and revised if roles and responsibilities are further refined during the Project development process. The Plan also may be revised as part of the Notice to Proceed (NTP) PODs by the BLM and Western, and the Construction POD developed for the USFS.

USFS standards and guidelines associated with the Uinta-Wasatch-Cache (Uinta National Forest Planning Area) (Uinta LRMP, USFS 2003) and Manti-La Sal (Manti-La Sal LRMP, USFS 1986) National Forests apply to the Selected Alternative. Some of these measures are specific to individual species and their habitats and vary across jurisdictions. The U.S. Department of Agriculture (USDA) National Best Management Practices for Water Quality Management on NFS Lands (USFS 2012; Section C.4.6 in Appendix C of the TWE Final EIS) also would be applicable to the Manti-La Sal National Forest and the Uinta National Forest Planning Area.

The WWEC Final Programmatic EIS BMPs and IOPs applicable to this Project are listed in Section 8.3.4 of the POD (**Appendix B** to this ROD), These WWEC measures are only applicable to the NFS Lands on the Uinta National Forest Planning Area, because the WWEC does not cross the Manti-La Sal

National Forest where the Selected Alternative is located. WWEC BMPs and IOPs must be adhered to wherever the Selected Alternative is located within a WWEC-designated utility corridor.

Additional Project- and species-specific conservation measures have been developed during preparation of the Final EIS. These measures are included in **Appendix F**, **Table F-1** of this ROD; identification of the desired outcome and rationale for requiring the mitigation measures are also included.

The additional mitigations include measures to minimize impacts to the following resources; soils, water resources; wetlands; vegetation communities and special status plant species; wildlife and special status wildlife species; aquatic species and special status fishes; cultural resources; visual resources; recreation; land uses including grazing and special designations; socioeconomics; wildland fire management; and migratory birds. Because mitigations meant to protect certain resources may cause negative effects to other resources, certain trade-offs needed to be considered. Because of this, the importance of resources' protection not regulated under law was considered for effectively controlling unauthorized motorized access, protecting water and aquatic resources from erosion and sedimentation effects, protecting special status plants and wildlife, considering current land management regarding visual impacts, and protecting existing rangeland operations.

# 1.1.4.2 National Forest System Withdrawn Lands

The TransWest transmission line crosses 6,450 acres of NFS lands on the Uinta-Wasatch-Cache National Forest that have been withdrawn from location and entry under the United States mining laws. These lands were reserved for the Department of the Interior, Central Utah Project (CUP) Completion Act Office for use in conjunction with the Utah Lake Drainage Basin and Diamond Fork Systems, Bonneville Unit of the Central Utah Project (Public Land Order No. 7668). The Reclamation Act of 1902 (43 USC § 388), the Sundry and Civil Expenses Appropriation Act (43 United States Code [USC] § 394) and the Reclamation Act (43 USC § 391) govern the Secretary of the Interior's (Secretary) withdrawal and outgrant authority on withdrawn lands, and where conflicting authorities exist, the Sundry and Civil Expenses Appropriation Act establishes the paramount authority of the Secretary to so deal with such lands. The Economy Act (31 USC § 1535) allows the Department to procure the Forest Service's services for the administration of permits on those lands. Accordingly, these lands are included as part of this decision and, in addition to the requirements described above in Section 1.1.4.1, the following measures would be required to ensure project consistency with the purposes for which these lands were withdrawn for the CUP.

- The portion of the TransWest transmission line permit crossing these withdrawn lands must be terminated without compensation if the transmission line is found to be incompatible with any CUP project purposes, or if construction, operation and maintenance of current and future needed CUP project features are hampered by the transmission line.
- No claims may be brought against the United States for termination of the TransWest transmission line.
- The withdrawal must be identified as dominant to any authorization provided by the Forest Service.
- The proposed transmission line would be compatible with the existing and future CUP transmission lines. (See enclosed figures of the transmission line).

# 1.1.5 Need for Amendments to the Land Use and Resource Management Plans

Two amendments of LRMPs are needed for the Selected Alternative, one in the Uinta National Forest Planning Area, and one in the Manti-La Sal National Forest. The amendment to the Uinta National Forest LRMP will consist of a project-specific exception to allow one high-voltage transmission line for an

18-mile length. The reason for the project-specific amendment is that the proposed transmission line would be inconsistent with the Visual Quality Objective (VQO) and utility corridor standard MP-8.2-4. The amendment for the Manti-La Sal National Forest LRMP will be a project-specific amendment to the VQO for the area crossed by the Project. The LRMP will be amended to add 21 acres of modification VQO and remove 21 acres of partial retention VQO from the General Big-game Winter Range (GWR) management area to allow the construction and operation of the TWE Project.

# 1.2 Background Information for Decision Process

The authority under which the USFS will issue a SUP for the transmission line and associated facilities is Title V of the FLPMA of October 2, 1976 (43 USC 1761-1771), as amended. The FLPMA provides the USFS with discretionary authority to grant ROWs on lands that they administer by considering impacts on natural and cultural resources (including historical resources). In making its decisions, the USFS must endeavor "to minimize damage to scenic and aesthetic values and fish and wildlife habitat and otherwise protect the environment" through avoidance or mitigation (FLPMA Title V). The FLPMA (§ 503) also encourages minimization of adverse environmental impacts and the proliferation of separate ROWs through co-location of ROWs and use of designated ROW corridors. Additionally, the Energy Policy Act of 2005, which recognized the need to improve domestic energy production and develop renewable energy resources across the Nation, encourages the use of public land for energy-related facilities. When analyzing applications, federal agencies also must consider the recommendations in the 2011 Western Electricity Coordinating Council (WECC) 10-Year Regional Transmission Plan regarding future transmission needs (WECC 2011).

According to the NFMA (16 USC 1604(f)(4)) and its implementing regulations, all actions authorized subsequent to the plan must be consistent with the approved LRMP. To be consistent with LRMPs, a project must do the following: 1) contribute to the maintenance or attainment of one or more goals, desired conditions or objectives, or not foreclose the opportunity to maintain or achieve any goals, desired conditions or objectives over the long term; 2) comply with applicable standards; 3) comply with applicable guidelines, and be designed in a way that is as effective in achieving the purpose of the applicable guideline; 4) occur in an area that is identified as suitable for that type of project, or in an area for which the plan is silent with respect to suitability (36 CFR 219.15(d)).

If a proposed project would not be consistent with the applicable LRMP, the responsible official shall modify the proposed project to make it consistent with the applicable plan, reject the proposal, amend the LRMP so that the project will be consistent with the plan as amended, or amend the LRMP contemporaneously with the approval of the project so that the project is consistent with the LRMP as amended and limited to apply only to the project (36 CFR 219.15(c)). If an amendment is necessary and the amendment process is initiated prior to May 9, 2012, the responsible official may complete and approve the LRMP amendment in conformance with the provisions of the prior planning regulation (36 CFR 219.17(b)(3)), including the use of the 1982 planning procedures allowed by the transition provisions of the prior planning regulation (36 CFR 200 to 299, revised as of July 1, 2010). Under the 1982 planning procedures, the responsible official determines if a proposed LRMP amendment would result in a significant change in the plan. Significance of the amendment is based on criteria provided in FSM 1926.52. The responsible official has the option to use the administrative review process of 36 CFR Subpart B, under which, when a plan amendment is approved in a decision document that approves one specific project and the amendment applies only to that project, the administrative review process at 36 CFR 218 applies (36 CFR 219.17(b)(3), 36 CFR 219.51(c) and 36 CFR 219.59(b)). Such an amendment would become effective on the date the project may be implemented in accordance with the administrative review regulations (36 CFR 219.17(a)(3)).

Environmental documents that were considered in making this decision included the Draft and Final EISs, Biological Evaluation (BE), Technical Reports for Aquatic Biological Resources, Terrestrial Wildlife Species, and Special Status Plant Species, Biological Assessment (BA), and Draft Inventoried Roadless

Area and Unroaded/Undeveloped Area Worksheets for the Evaluation of Wilderness Qualities or Attributes and Roadless Area Characteristics.

# 2.0 Project Information

# 2.1 Project Background

TransWest proposes to construct, operate and maintain the TWE Project. The TWE Project is an extrahigh voltage (EHV) direct current (DC) transmission system extending from south-central Wyoming to southern Nevada. The TWE Project begins at a northern terminal near Sinclair, Wyoming and terminates at a southern terminal at the Marketplace Hub in the Eldorado Valley near Boulder City, Nevada.

The TWE Project, as originally conceived, was to transport fossil fuel and renewable wind energy from Wyoming to utilities in Arizona, California, Colorado, New Mexico, Nevada, and Utah. In addition to providing access to energy resources for rapid growth areas in the Southwest, the TWE Project is intended to benefit all western states by providing improved reliability of the western electrical grid. In March 2006, Arizona Public Service (APS) signed a Memorandum of Understanding (MOU) with the Wyoming Infrastructure Authority (WIA) and National Grid (an international electricity and gas company) to collaborate on a transmission corridor study. In December 2006, APS completed a feasibility report that concluded that the TWE Project potentially would create significant benefits for its customers.

During the same timeframe, Rocky Mountain Power (a subsidiary of PacifiCorp) was investigating the feasibility of developing the Gateway South Transmission Project (later to become known as the Energy Gateway South Project [EGS Project]), a proposed transmission line from eastern Wyoming into Utah, terminating at the Crystal Substation in Nevada. The EGS Project shared many corridor location aspects with the TWE Project. In August of 2007, National Grid, APS, Rocky Mountain Power, and the WIA entered into an interim agreement (IA) to plan for development of new EHV transmission lines for the western U.S. These proponents' system studies concluded that there was a demonstrated need to transmit electrical power from Wyoming to energy demand areas in Utah, Nevada, Arizona, and Southern California. Because both APS and Rocky Mountain Power had sponsored previous feasibility studies, those previous studies were incorporated into the collaborative effort to identify feasible transmission corridors developed under the IA. The collaborative study area originally encompassed much of Wyoming, northwestern Colorado, southeastern Idaho, Utah, far eastern Nevada, and central Arizona. The analysis that resulted from the IA collaboration between National Grid, APS, Rocky Mountain Power, and WIA identified a preliminary set of EHV transmission corridors within which construction and operation of these facilities were considered to be environmentally feasible. The APS interests in the TWE Project were subsequently acquired by National Grid.

Because it was necessary for the TWE Project to cross federal lands, National Grid filed a ROW Standard Form 299 (SF 299) Application for Transportation and Utility Systems and Facilities on Federal Lands (ROW application) with the Department of the Interior's (DOIs) BLM on November 30, 2007. The ROW application included the proposal to cross NFS lands as part of the TWE Project. In 2008, The Anschutz Corporation (TAC) formed TransWest Express LLC (TransWest – a wholly owned subsidiary of TAC), and acquired the TWE Project from National Grid. Subsequently, on September 2, 2008, National Grid and TransWest submitted an amended ROW application requesting the assignment of the unserialized application and related Project file to BLM. TransWest submitted an amended ROW application for the TWE Project in December 2008, and additional amended ROW applications in 2009, 2010, and 2014 (as described below).

Following the December 2008 ROW application, TransWest and the BLM conducted pre-scoping meetings with the BLM field offices (FOs) and national forests located within the TWE Project area during February and March 2009.

In January 2010, TransWest submitted another amended ROW application. The primary difference between the amended 2008 ROW application and the amended 2010 ROW application was TransWest's stated need to allow for future interconnection with the Intermountain Power Project (IPP) transmission system near Delta, Utah. In its January 2010 ROW application, TransWest "identified a need to provide for flexibility and maximize the use of transmission capacity that may become available by configuring the TWE Project to allow for future interconnections with other existing and planned electrical systems that can deliver electric energy from Wyoming to markets in the Desert Southwest region. This need is met by providing for a potential interconnection with the IPP transmission system near Delta in Millard County, Utah, as well as to the Marketplace Hub near Boulder City, Nevada." The 2010 ROW application also moved the TWE Project originating point farther south and west to the Sinclair, Wyoming, area. However, the Aeolus Substation remained as an alternative originating point. Additionally, based on USFS and other agency pre-scoping input, other corridors or segments were added, deleted, and/or modified to meet the revised Project interests and objectives.

Following TransWest's submittal of the amended January 2010 ROW application, TransWest and Western entered into a non-binding term sheet through which they are evaluating each holding a 50 percent joint ownership in the TWE Project. TransWest and Western are developing the terms of their joint ownership, such as construction, operation, and maintenance of the Project. Under the American Recovery and Reinvestment Act, Western was granted authority to borrow funds from the U.S. Treasury to (among other things) plan, finance, and construct new or upgraded transmission facilities that deliver renewable energy. Western would use this authority for its participation on the Project.

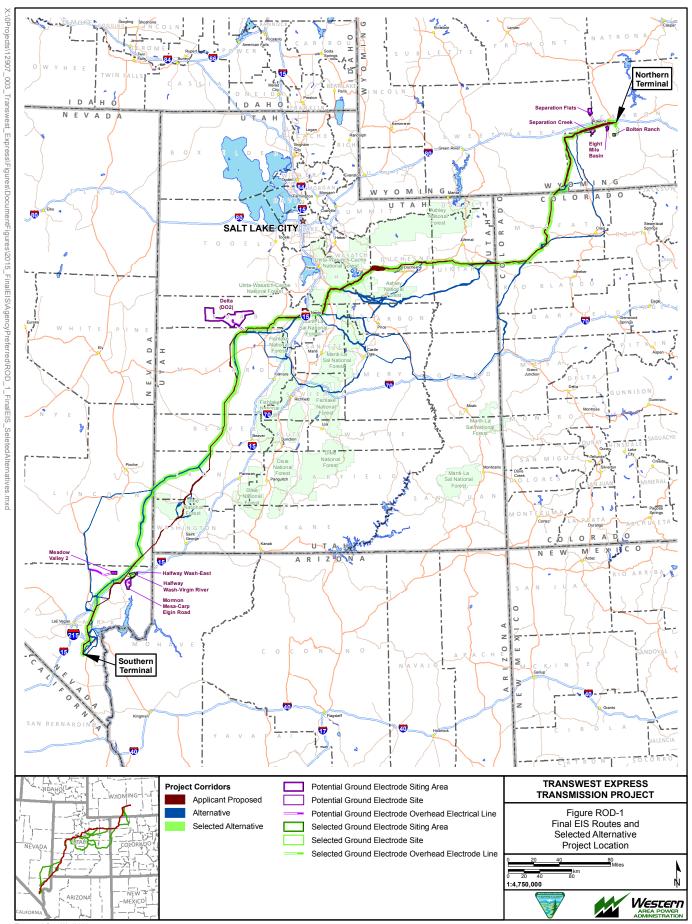
The BLM (through the Wyoming State Office) and Western are joint lead agencies for the NEPA process, and have mutually overseen the preparation of the EIS. The USFS, Intermountain Region, is one of 49 cooperating agencies who assisted in the preparation of the EIS. A MOU was implemented between the lead agencies and each cooperating agency. Per the MOU between USFS and the BLM executed in December 2009, the USFS has participated throughout the NEPA process. USFS participation has included assisting in identification of environmental issues and an adequate range of alternatives, providing relevant data and analysis requirements, and providing input on preliminary draft documents, This participation has been accomplished by assignment of a full Interdisciplinary Team (ID Team), including a USFS Project Manager, to reflect the USFS' specialized knowledge on pertinent resource issues. A USFS Line Officer has been assigned the decision making responsibilities since the execution of the MOU, and has monitored the NEPA process and reviewed the resulting analysis to inform the USFS decision.

# 2.2 Proposed Action

# 2.2.1 Description

The Applicant's proposed action considered by the USFS and which the decision outlined in Section 1.0 is based upon consists of the following facilities and improvements:

- A 600-kV DC transmission line, approximately 725 miles in length, extending across public (state and federal) and private lands in Wyoming, Colorado, Utah, and Nevada (Figure ROD-1). The transmission line ROW would be approximately 250 feet wide.
- Two terminal stations and associated interconnections to be located on private or public lands, one at either end of the transmission line, near Sinclair, Wyoming, and at the Marketplace Hub in the Eldorado Valley, within Boulder City, Nevada.
- Access routes, including improvements to existing roads, new overland access, and new unpaved roads to access the proposed Project facilities and work areas during the construction, operation, and maintenance Project phases.



- Two ground electrode facilities each connected to the respective terminal with a low voltage
  electrical line, one to be located on private or public lands within 100 miles of each of the
  Northern and Southern terminals. These ground electrode facilities would be used to maintain
  system operations in the event of the loss of one or more poles (or circuits).
- A network of 12 to 15 fiber optic communication and regeneration sites, typically within the 250-foot-wide transmission line ROW, and microwave facilities at each terminal.

Two design options have been included to maintain Project flexibility. Additional information on the design options in relation to Project alternatives is provided in Section 4.3.2.

- Design Option 2: The Project would construct a 600-kV DC transmission line to deliver energy from the Northern Terminal in Sinclair, Wyoming, to a new alternating current (AC)/DC converter station near the existing IPP substation near Delta, Utah. From there, a single circuit 1,500megawatt (MW), 500-kV AC transmission line would be constructed to one of the existing substations in the Eldorado Valley, in Boulder City, Nevada (Marketplace Hub).
- Design Option 3: The Project would utilize a two-phase approach. Phase one would construct the portion of the transmission line from Sinclair, Wyoming, to the IPP substation near Delta, Utah, (with 3,000-MW, 600-kV DC capability for phase two conversion), which would be operated as a 1,500-MW, 500-kV AC transmission system. Phase two would construct the Northern and Southern terminals, the remaining portion of the 3,000-MW, 600-kV DC line from IPP to the Southern Terminal (at the original locations), the ground electrode systems, and convert operations to a DC system. This approach would be required if the demand for Wyoming resources in the desert southwest proves to be slower in development than expected.

Implementation of the design options would only be considered under the conditions that sufficient capacity became commercially available to transmit energy delivered by the Project to California, and that the Project was able to establish commercial interconnection agreements with the utility owning and operating the IPP transmission line.

TransWest's primary goal is to provide the transmission infrastructure and capacity necessary to reliably and cost-effectively transmit up to 3,000 MW of electric power from Wyoming to the desert southwest, while meeting the following criteria:

- Provide for efficient, cost-effective, and economically feasible transmission of approximately 20,000 gigawatt hours per year of clean and sustainable electric energy from Wyoming to markets in the desert southwest region;
- Meet North American Electric Reliability Corporation Reliability Standards and WECC planning criteria and line separation requirements;
- Maximize use of existing and designated utility corridors and access routes to the extent practical;
- Provide these benefits in a timely manner to the desert southwest region and the broader Western U.S. to meet the region's pressing environmental and energy needs. TransWest has identified a need for the Project by the expected in-service date of 2015 or as soon as the regulatory reviews can be completed; and
- Provide for flexibility and maximize the use of infrastructure to increase future transmission capacity by configuring the Project to allow for future interconnection with the IPP transmission system near Delta, Utah.

# 2.2.2 Plans of Development

To directly carry forward mitigation and other stipulations outlined in the Final EIS into construction and operation of the Project, a POD has been drafted in accordance with Title 43 CFR 2804.25(b), in coordination with USFS. This document is required as a condition of signing this ROD and for the USFS to issue the Project a special-use authorization. The POD describes in detail the activities associated with construction, operation, and maintenance of the Project. Due to the availability of survey and detailed engineering data, the POD is being developed in two phases: 1) a POD with sufficient detail of the Selected Alternative to demonstrate compliance with NEPA (Appendix B to this ROD); and 2) a final POD with detail for construction, as agreed to by the USFS. The purpose of the first POD was to provide a sufficient level of information to inform the USFS in making their decision. Since final engineering based on resource survey information is not available at this time, the framework level of detail in the initial POD will be expanded in the final POD, after geotechnical investigations are completed, facilitating more site-specific design detail. Additionally, the final POD will be informed by pedestrian surveys associated with Section 7 of the Endangered Species Act (ESA), Section 106 of the National Historic Preservation Act (NHPA), Paleontological Resources Preservation Act (PRPA), and Section 104 of the Clean Water Act (CWA). The final POD will be developed through continued coordination between the Applicant and the USFS and will include adjustments to the detailed mapping of Project facilities (transmission line structure locations, temporary access roads, and other ancillary facilities) and the identification and depiction of site-specific construction actions, including mitigation.

Development of the final POD in collaboration with the USFS is a condition of this decision and will be a condition of the special-use authorization.

#### 2.2.3 Environmental Protection Plans

The POD contains 24 plans that detail TransWest's commitment to mitigate adverse impacts resulting from construction, operation, and maintenance of the TWE Project. These plans are described in Appendices to the POD (**Appendix B** to this ROD). **Table C-1** in **Appendix C** of this ROD provides the status of these environmental protection plans for the current and subsequent phases of the POD. The plans will be implemented and enforced as an attachment to the special use authorization. Implementation and monitoring of these plans will occur through the USFS Implementation Team, which consists of a line officer, team lead, and resource support specialists. As noted in **Table C-1** in this ROD, information from the PA will be incorporated into the Cultural Resources Protection and Management Plan as part of the Construction POD. The Biological Opinion (BO) also has been attached to the Final RODs for the federal agencies.

# 2.3 Purpose and Need

The purpose of the USFS federal action is to respond to TransWest's application for a SUP to construct, operate, maintain, and decommission a transmission line on federal lands. The need for this action is to fulfill USFS responsibility under FLPMA and NFMA (16 USC 1601-1614) and USFS Special Use Authorization regulations at 36 CFR 251 Subpart B - Land uses and its implementing polices in FSM 2700, FSH 2709.11, and related environmental policy direction in FSM 1900 and FSH 1900. To assist in these objectives, USFS designates utility corridors through federal lands and endeavors to co-locate linear facilities such as transmission lines within those corridors, thereby avoiding the proliferation of new routes through sensitive lands and wildlife habitats (43 USC 1763). These designated corridors conform to long-range corridor needs established by the U.S. Departments of Agriculture, Energy, and Interior

along with six other federal agencies<sup>3</sup> under Section 368 of the Energy Policy Act of 2005 and correlate with designated corridors on adjoining lands.

The USFS's purpose and need also must consider further guidance from the Energy Policy Act of 2005, which recognized the need to improve domestic energy production, develop renewable energy resources, and enhance the infrastructure (e.g., transmission lines) for collection and distribution of energy resources across the nation. FSM 2700, Zero Code, section 2703.2 provides emphasis on the consideration of energy transmission corridor and use on NFS land as a public interest component when considering a "proposal" that moves forward for consideration as an application. To support this, the USFS is charged with analyzing applications for utility and transportation systems on federal lands they administer, while balancing the other beneficial uses the federal lands may be needed. When analyzing applications, the agencies also must consider the recommendations in the 2011 WECC 10-Year Regional Transmission Plan regarding future transmission needs (WECC 2011), to the extent necessary to assure balanced land use, reliability, and resource concerns.

# 2.4 Assessment and Disclosure of Environmental Impacts

In response to the permit application, the BLM and Western, as the joint-lead federal agencies and in coordination with the USFS and other cooperating agencies, prepared a Draft EIS (BLM 2013) and Final EIS (BLM 2015) for the Project pursuant to the requirements of NEPA (40 CFR 1500-1508) and other laws, regulations, and policies including the NFMA, and the LRMPs for the Ashley, Dixie, Fishlake, Manti-La Sal, and Uinta-Wasatch-Cache National Forests. The EIS evaluated and disclosed the potential Project-related environmental impacts that could result from the implementation of the Proposed Action and any of the alternatives, as discussed in Chapter 4.0 of the Final EIS.

The USFS participated as a cooperating agency for the NEPA process for the Selected Alternative for the Project. The NEPA regulations (40 CFR 1506.3) specify that a cooperating agency may adopt, without recirculating, the EIS of a lead agency when their review of the EIS concludes that its comments, suggestions, and requirements have been satisfied. Based on my independent review of the EIS, I have concluded that the comments and requirements of the USFS have been satisfied. Therefore, I am adopting the Final EIS (BLM 2015) as amended by the addendum as the USFS Final EIS (USFS 2017) and associated record to support my decision.

In accordance with the direction contained in the USFS regulations for special use authorities (36 CFR 251.53) and proposal and application requirements and procedures (36 CFR 251.54), I have the authority to issue special use authorizations for this project crossing National Forest System lands.

Additionally, the Applicant must obtain or meet all necessary State, local, and tribal approvals and/or permitting requirements, including a Certificate of Public Convenience and Necessity from the Utah Public Service Commission.

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<sup>&</sup>lt;sup>3</sup> Signatories to the 2009 MOU are the Department of Agriculture, the Department of Commerce, the Department of Defense, the Department of the Interior, the Environmental Protection Agency, the Federal Energy Regulatory Commission, the Advisory Council on Historic Preservation, and the White House Council on Environmental Quality. Website

https://www.whitehouse.gov/administration/eop/ceq/initiatives/interagency-rapid-response-team-for-transmission accessed on July 29, 2016.

# 2.5 Consideration of Issues

The BLM, Western, and USFS considered effects on all environmental resources as part of the process of evaluating the impacts of the alternatives in the EIS, including the identification of the Agency Preferred Alternative. The Project ID Team, including those assigned from the USFS, considered the effects of each alternative route on climate and air resources, geological resources, paleontological resources, soils, water, vegetation, migratory birds, fisheries, special status species, land use, rangeland resources, recreation, transportation, visual resources, wildland fire, health and safety, land use, special designations, and socioeconomics. All practicable measures to avoid or minimize environmental impacts to resources were adopted and will be implemented as part of Selected Alternative (see Appendix C-5 of the Final EIS). I believe that all potential effects from Project activities have been disclosed. I have reviewed the LRMP standards and guidelines and have determined that two amendments are needed for the Project to be consistent with the LRMPs.

The Selected Alternative route through Utah was chosen in consideration of impacts to natural resources (including sage-grouse), visual resources, cultural resources, and private lands. This required consideration not only of the potential impacts on these resources in Utah, but also consideration of an "all-lands" approach that includes the impacts on resources in the remainder of Utah not under USFS jurisdiction, as well as Colorado and Nevada because the preferred alternative must connect across state lines.

The specific considerations in choosing the Selected Alternative in Utah include the following:

- The Selected Alternative complies with ESA, NHPA, Archaeological Resources Protection Act (ARPA), and CWA. These four laws have been enacted to protect finite resources – endangered animals, historic artifacts and sites, and water.
- The Selected Alternative avoids desert tortoise habitat in Utah.
- The Selected Alternative maximizes avoidance of potential habitat for threatened and endangered plant species. The preferred route avoids 43 miles identified as potential habitat for the Uintah Basin hookless cactus and goes through a smaller amount of modeled potentially suitable clay phacelia habitat.
- There are a multitude of historic sites along all alternatives but three are of more cultural importance than others that we have documented. Those three are: Yellow-Springs cultural complex, Mountain Meadows National Historic Landmark, and the Old Spanish Trail. All of these cultural assets come together along the alternatives that would go through the Dixie National Forest. That area also has the highest known and expected density of archaeological sites along the alternatives. The Selected Alternative minimizes impacts to important and sensitive cultural and historic resources in southwestern Utah by avoiding the crossings in and near the Dixie National Forest.
- The Selected Alternative avoids the San Rafael Swell, and avoids conflicts with significant cultural resources including the Old Spanish Trail and Quitchupah Creek area. The San Rafael Swell is an area of high geologic and anthropologic importance. It is critical to maintain the cultural and scenic integrity of this area. The Old Spanish Trail also is present in the vicinity of several of the alternatives that transect the San Rafael Swell. One of those routes also would have crossed the Quitchupah Creek area, which is considered sacred and traditional by the Paiute Tribe. Alternatives that impacted the San Rafael Swell were not selected due to significant resource conflicts.
- The Selected Alternative avoids the Tribal trust lands of the Uintah and Ouray Indian Reservation..
- The Selected Alternative maximizes length of transmission line co-located with existing aboveground utilities.

- The Selected Alternative minimizes new access road construction in steep or mountainous terrain when compared to other alternatives. There will be no new permanent access routes authorized on NFS lands under this decision.
- The Selected Alternative minimizes Project disturbance in Inventoried Roadless Areas and is consistent with the requirements of the Roadless Area Conservation Rule (USFS 2001).

# 2.5.1 Greater Sage-Grouse

Impacts on greater sage-grouse and loss of their habitat were identified as issues by both agencies and the public during Project scoping. The extent of greater sage-grouse habitat crossed by potential routes and resulting direct and indirect impacts on greater sage-grouse were issues considered during development of alternative routes for the Project.

During preparation of the EIS, changes in management of sage-grouse in the Project area included interim conservation recommendations for greater sage-grouse and their habitat in USFS Regions 1, 2, and 4 to promote conservation of sustainable greater sage-grouse populations and their habitats while the USFS engaged in a planning process to determine whether to amend 20 LRMPs to incorporate greater sage-grouse conservation measures. To achieve compliance with the interim conservation recommendations, the BLM, Western, the USFS, other Project cooperating agencies, and the Applicant collaborated to develop strategies to avoid, minimize, and compensate for the potential effects on greater sage-grouse as outlined in Appendix J of the Final EIS. These strategies include removal of alternative routes from consideration that would have the greatest effects on greater sage-grouse and modification of alternative routes carried forward to reduce impacts on greater sage-grouse. The Applicant has prepared a voluntary greater sage-grouse conservation and mitigation plan, including a Habitat Equivalency Analysis (HEA), which describes actions that will be taken to offset unavoidable effects on greater sage-grouse. To prepare this plan, the Applicant convened a group of sage-grouse biologists (the HEA Technical Working Group) which was led by the BLM, to provide input and guidance during the development of the Applicant's Greater Sage-Grouse Mitigation Plan, including the HEA component of the mitigation plan. The agency biologists worked closely with the Applicant to ensure adequacy of the mitigation analysis and corresponding final product, as well as address concerns and questions, develop assumptions for the analysis, and resolve issues as they arose. The HEA Technical Working Group met as needed during development of the Sage-Grouse Mitigation Plan and HEA.

On September 23, 2015, the USFS announced the availability of the ROD and Approved Land Management Plan Amendments (ALMPAs) for the Great Basin Region Greater Sage-Grouse Sub-regions of Idaho and Southwestern Montana, Nevada and Northeast California, and Utah (80 Federal Register 57333). The ROD for the approved ALMPAs stated that this Presidential priority Project will fully mitigate potential impacts to greater sage-grouse "through (1) micro siting to adjust the route to avoid important habitat and leks, (2) transmission tower design to minimize the potential for adverse impacts to greater sage-grouse such as perching for predators, and (3) compensatory mitigation measures, such as habitat restoration and pre-suppression activities to reduce the risk of habitat loss due to fire, to offset any unavoidable impacts to a conservation gain standard."

The ROD and ALMPAs further note that this Project is required to be consistent with the management plan standards prior to issuance of the ALMPAs. Furthermore, the ALMPA did not introduce significant information that was not considered in the Final EIS. Impacts to priority habitat management areas and the general habitat management areas identified in the ALMPAs were analyzed in the Final EIS (defined at that time as the Utah Department of Wildlife-identified greater sage-grouse occupied habitat). Therefore, the existing analysis is not affected and the Project remains consistent even when considering the ALMPAs. Furthermore, the Selected Alternative avoids important habitat and leks on NFS lands as identified by priority habitat management areas or general habitat management areas identified in the ALMPAs. Therefore, my decision is consistent with the LRMPs and the ALMPAs.

# 2.6 Scoping Process

Pre-scoping activities were conducted in 2009 and spring 2010 with the BLM FOs, USFS, and the cooperating agencies. Comments received during pre-scoping were considered in developing the alternative corridors presented to the public during the scoping period. The following issues were identified for Utah:

- Suggestions to avoid the South Unit of the Ashley National Forest and the Nine Mile Canyon cultural resource area (Utah).
- Duchesne County prefers the proposed corridor parallel existing major utility lines in their county (Utah).
- BLM Cedar City FO commented on why the southern Utah corridor (segment C260) did not follow the WWEC (Utah).
- BLM Vernal FO supported the elimination of Segment U400A because there were habitat areas
  of concern along that corridor segment (Utah).
- BLM Fillmore FO noted that there is a Congressional moratorium on amending their planning documents (House Range and Warm Springs Resource Management Plans [RMPs]). The existing corridor route along Interstate 15 (I-15) is an underground-only corridor (segments U125, U190, U195, and U235 in the Fillmore FO) and would require a plan amendment to construct an above-ground transmission line. As such, the BLM Fillmore FO would support eliminating segments U125 and U195 (Utah).
- BLM Fillmore FO commented that there are many cultural resources near the Intermountain Power Line as well as a 90-mile transmission line associated with a wind energy development project north of Milford (Utah).
- The applicant proposed corridor would conflict with the Ag 20 Zone of the Millard County Plan (Utah).

The Notice of Intent (NOI) for the Project was published in the *Federal Register* on January 4, 2011. A Project newsletter was concurrently mailed to approximately 23,000 interested parties including federal, state, and local agencies; tribal governments; and potentially affected landowners along the proposed and alternative routes. The BLM and Western placed display advertisements in local newspapers and public service announcements were submitted for broadcast on local radio and television announcing the public scoping meetings. TransWest also conducted additional outreach related to the scoping process. The BLM and Western hosted 23 public scoping meetings near the proposed Project and alternative routes with a total attendance of 678 individuals. During the scoping period, BLM and Western also met with representatives of several County Commissions. The meetings were scheduled to coincide with the scoping meeting in their respective county.

During the public scoping period, the BLM and Western received a total of 622 comment submittals (e.g., letter, comment form, email). Following the close of the scoping public comment period, comments were compiled and analyzed to identify substantive issues and concerns (as directed by Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1). Within each comment submittal, individual comments were identified, reviewed, and entered into an electronic database. The comment analysis process resulted in approximately 2,319 individual comments. The comments were synthesized into issues and topical areas defining the focus of the NEPA analyses disclosed in this EIS. A detailed summary of the scoping issues is contained in the Project Scoping Summary Report, which is posted on the BLM Wyoming State Office website: http://www.blm.gov/wy/st/en/info/NEPA/documents/ hdd/transwest.html.

# 2.7 EIS Public Review process

The BLM and Western released the Draft EIS for a 90-day public comment period, as announced by publishing a Notice of Availability (NOA) in the Federal Register on July 3, 2013. USFS also published an NOA adopting the Draft EIS on December 6, 2013, as discussed below. The Draft EIS review period was announced using the same or similar methods as were used during scoping. In August and September 2013, the BLM and Western hosted a series of 13 public meetings/hearings throughout the areas crossed by the proposed Project and alternative routes to provide information on the proposed Project and the Draft EIS. Each meeting contained informational displays about the EIS process and schedule, Project locational maps, impacts to resources, and potential land use plan amendments and provided a station for people to provide written and oral comments on the Draft EIS. Attendees had the opportunity to have their verbal comments transcribed by a court reporter for the public record.

The BLM and Western received a total of 453 individual comment submittals (e.g., letter, comment form, email, or court reporter transcription). Additionally there were 109 submittals that contained all or portions of one of the four form letters that were submitted for the Project. Following the close of the Draft EIS public comment period, comments were compiled and analyzed to identify substantive issues and concerns (as directed by Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1). The comment analysis process resulted in approximately 1,963 substantive comments requiring responses.

The USFS released a *Federal Regist*er notice on December 6, 2013, that formally adopted the Draft EIS, provided notice that the proposed decision would be subject to the USFS predecisional review process, and opened a 45-day public comment period pursuant to changes in the administrative review process for USFS projects as codified in 36 CFR 218. Legal notices to this effect were placed in the Deseret News, Salt Lake Tribune, and Sun Advocate on December 17, 2013 as well as the Richfield Reaper, St. George Spectrum, and Vernal Express on December 18, 2013. These were considered the six major newspapers that serve the communities near the five national forests potentially affected by the Project. The USFS received two comment submittals during our separate comment period. The comment analysis process resulted in 28 additional substantive comments requiring responses, all of which also were represented in the comments received during the BLM/Western comment period.

In preparing the Final EIS, the BLM and Western considered all comments. Appendix L of the Final EIS contains each unique substantive comment received, and its associated response. Appendix L also contains a description of the comment analysis and response process.

Additional public input was received by the agencies and the applicant late in the planning process. These additional input asked agencies to consider a minor reroute in Salt Creek Canyon to mitigate impacts to private lands in the canyon. The reroute would result in an additional 0.3 miles of NFS lands crossed. This crossing would be within the area analyzed in the Draft EIS, and would be co-located with two existing high-voltage transmission lines through an unroaded/undeveloped area inventoried in 2005. There are no other known resource concerns, and the Selected Alternative could be constructed with minimal impacts to NFS lands in this area.

The USFS has prepared an addendum to the TWE Final EIS that reflects changes required to incorporate the analysis of the Salt Creek Canyon Reroute Micro-siting Option. We are formally adopting the TWE Final EIS released by BLM and Western (BLM 2015), as amended by the USFS addendum as USFS (2017).

# 3.0 Alternatives Considered

# 3.1 Alternatives Development

An iterative, adaptive process was used for this Project to identify an adequate range of alternative transmission corridors that directly respond to addressing potential resource or siting constraints and help to inform decision-makers. Resource and/or siting constraints identified through the NEPA process and associated cooperating agency coordination were then used to guide further refinements to the alternative transmission alignments and reduce the width of the transmission line corridors previously analyzed between the Draft and Final EIS.

This iterative process allowed for the systematic identification of alternatives and mitigation measures to reduce resource impacts. This reduction in resource impacts occurred by allowing the flexibility for site-specific transmission line routing within the refined transmission corridor described in the Final EIS. The boundaries of the corridor restrict routing options based on large-scale resource constraints. Subsequent fine-scale routing of the transmission line can then avoid site-specific sensitive resources and ensure implementation of required mitigation as disclosed in the Final EIS and required in this ROD. Site-specific resource surveys conducted prior to the Project's approval for construction, combined with the flexibility of the refined transmission corridor, ensure that this routing minimizes resource impacts. This approach ensures transparency through the NEPA analysis by minimizing Project variances.

#### 3.2 No Action Alternative

Under the No Action Alternative, the BLM or USFS would not issue ROW grants or SUPs and the Project would not be constructed. Under the No Action Alternative, Western would not provide funding to the Project. No RMPs, Management Framework Plans, or Forest Plans would need to be amended if the No Action Alternative is selected.

#### 3.3 Alternatives Considered in Detail

The Project has been split into four distinct Project regions, each of which required an independent decision by the lead agencies among transmission line routing alternatives based on region-specific topographical or resource constraints.

The alternative transmission line routes are depicted by Project region in **Figure ROD-2** through **Figure ROD-5** and described in the following sections. The alternatives within each of these Project regions can be combined to define a distinct end-to-end route from Wyoming to Nevada. The result is a complete Project decision across all Project regions.

The width of the refined transmission corridors analyzed in the Final EIS range from approximately the ROW width (250 feet) to several thousand feet wide depending upon terrain, access restrictions, existing access, designated utility corridors, environmental constraints, jurisdictional constraints, co-location, landowner requests, and the potential for additional changes in areas with constraints. Each alternative route is further defined by a transmission alignment within the transmission corridor. The preliminary engineered alignments within the refined transmission corridors are based upon additional engineering, aerial terrain surveys, field engineering surveys, and siting opportunity and constraint data to avoid those areas with large-scale resource concerns or physical constraints that are not consistent with siting a transmission line. The USFS final decision contained in this ROD is for a 250-foot-wide ROW.

#### 3.3.1 Facilities and Transmission Line Routes

# 3.3.1.1 Region I

#### Northern Terminal

The Northern Terminal would be located approximately 3 miles southwest of Sinclair, Wyoming (Carbon County), on private lands. The terminal would include an AC/DC converter station and adjacent AC substation. The AC/DC converter station would include a 600-kV DC switchyard; AC/DC conversion equipment; transformers; and multiple equipment, control, maintenance, and administrative buildings. Two buildings would house the AC/DC conversion equipment; smaller buildings would house the control room, control and protection equipment, auxiliary equipment, and cooling equipment. Connections to the existing transmission infrastructure also would be constructed. The three major components (AC/DC converter station, 500-/230-kV AC substation, and 230-kV AC substation) are planned to be co-located and contiguous.

# Alternative I-A Transmission Line Route (Proposed Action)

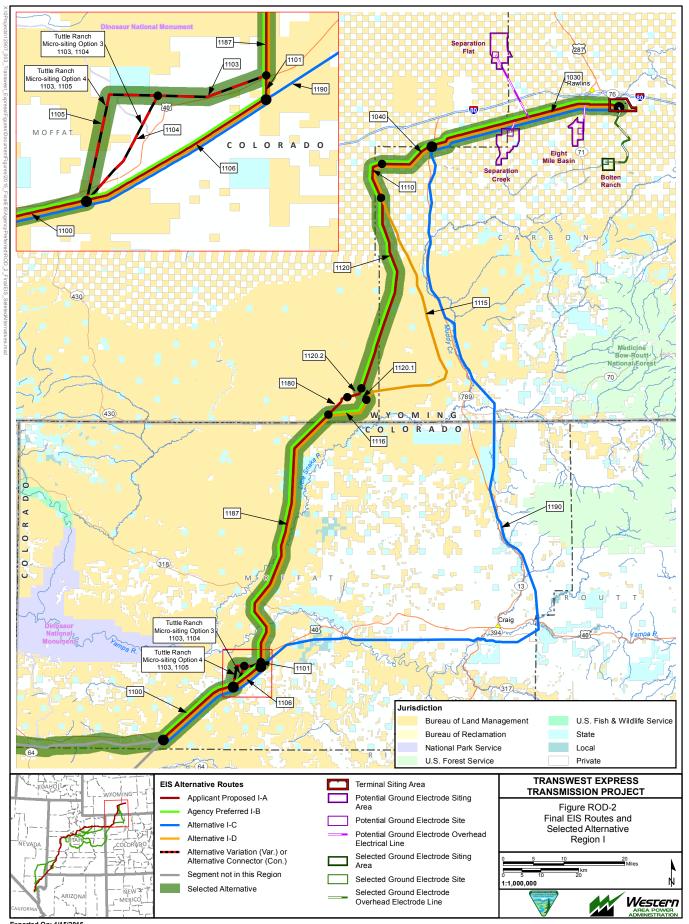
TransWest's proposed alignment would begin in Sinclair, Wyoming, and would travel west just south of the I-80 corridor to Wamsutter. At Wamsutter, it would turn south and generally follow the Carbon-Sweetwater county line along a corridor preferred by the Wyoming Governor's Office and Carbon and Sweetwater counties. It then would continue south-southwest across the Wyoming-Colorado state line and south along a corridor preferred by Moffat County and coordinated with the BLM Northwest Colorado District Office's ongoing Sage Grouse planning effort. It would then intersect with U.S. Highway 40 (US-40) just west of Maybell, Colorado. The alignment would then generally parallel US-40, turning southwest toward the Colorado-Utah border.

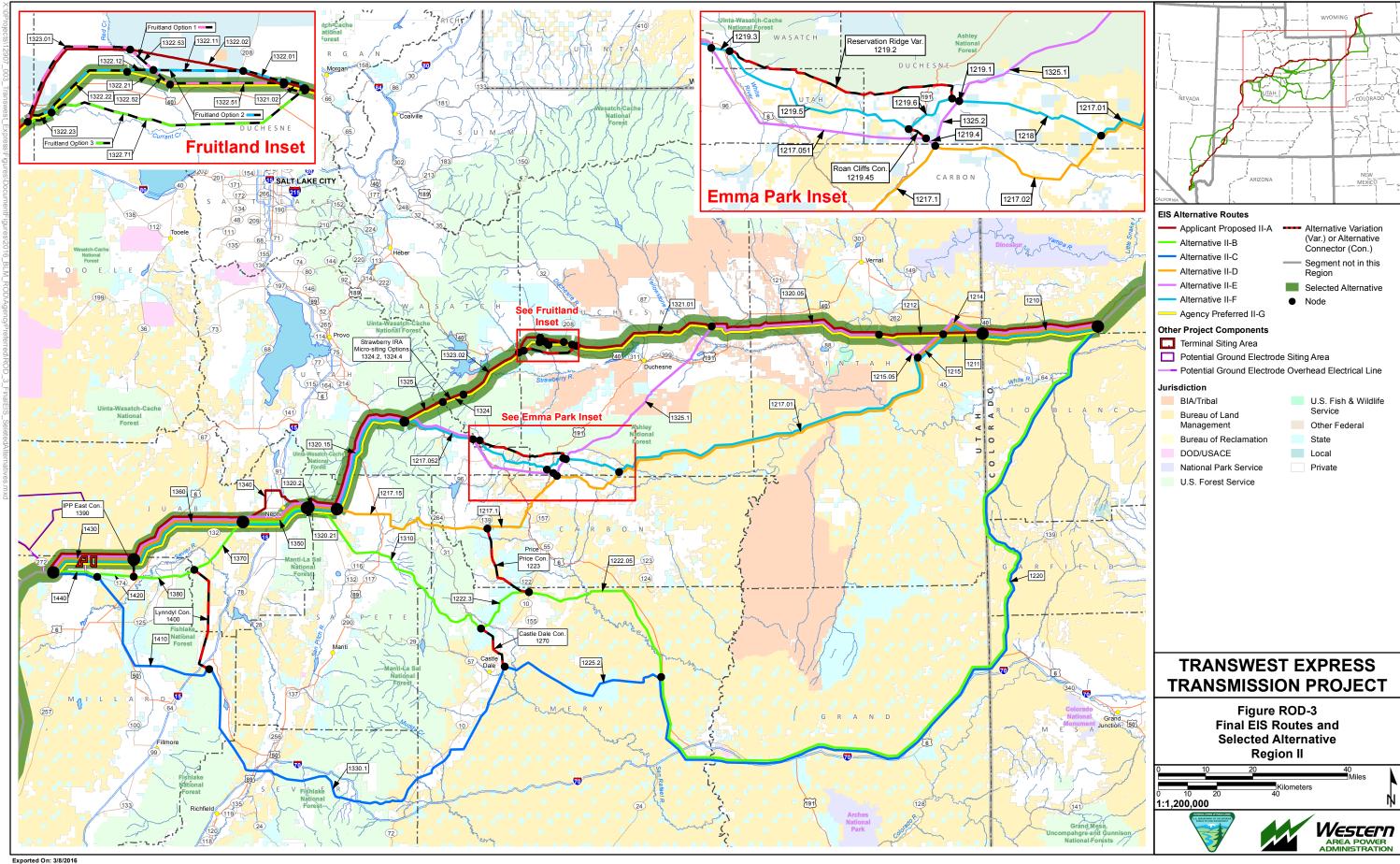
Alternative I-A includes segments 1030, 1040, 1100, 1101, 1106, 1110, 1120, 1120.2,1180, and 1187, and is approximately 156 miles in length, 66 percent of which would be located on BLM lands; 24 miles would be in BLM RMP utility corridors, and 25 miles would be in WWEC corridors. There would be 201 miles of access routes associated with this alternative.

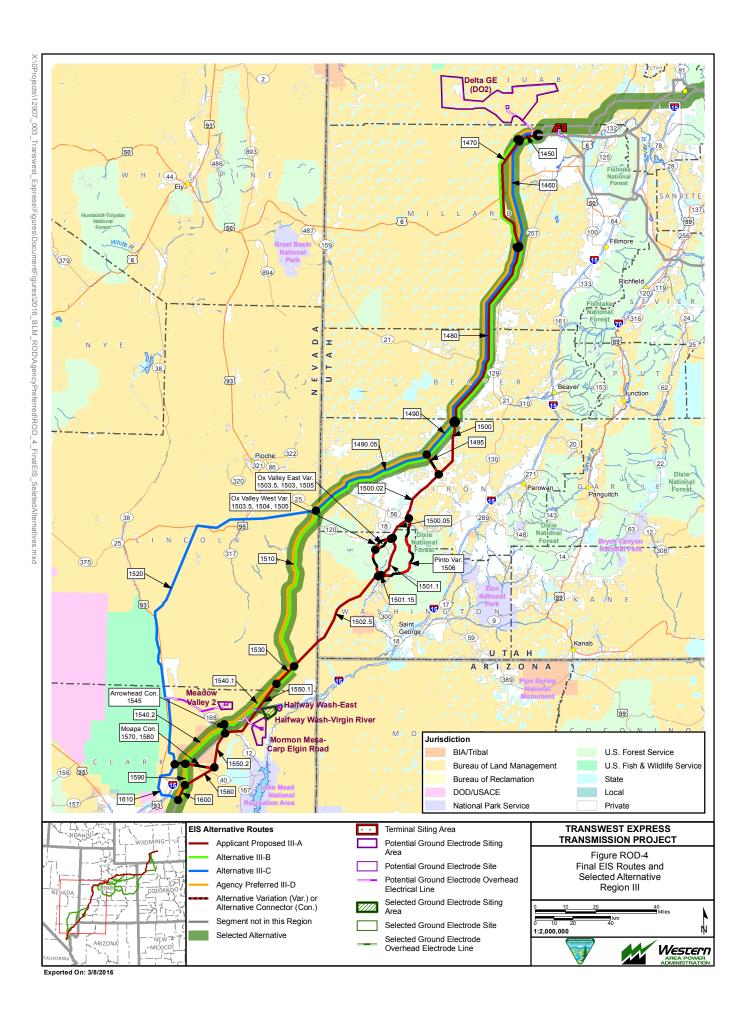
# Alternative I-B Transmission Line Route

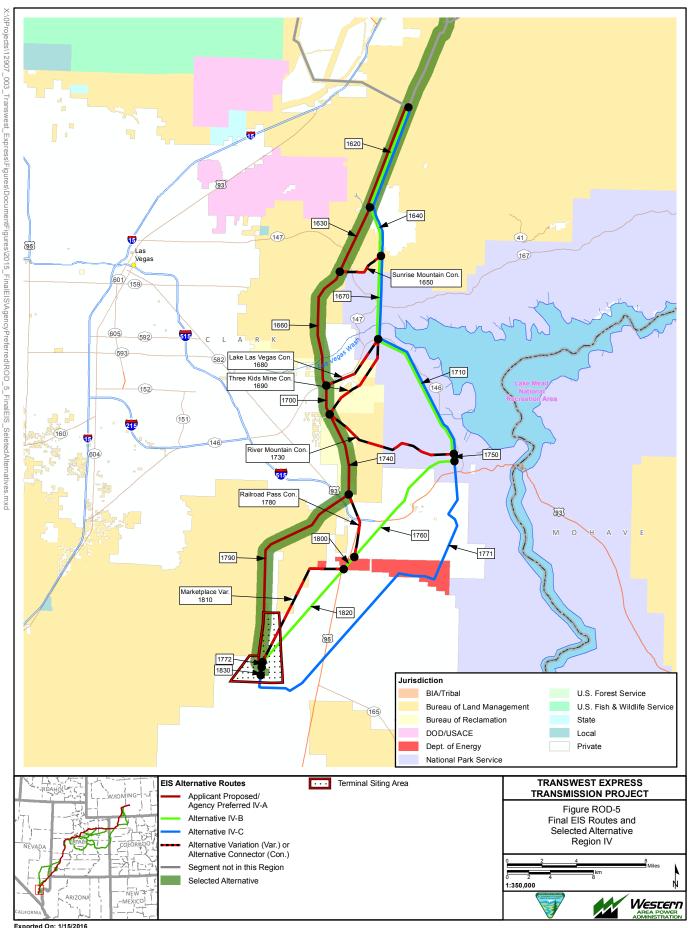
Alternative I-B as considered in the Final EIS would be the same as Alternative I-A for nearly its entire length, with one exception just north of the Wyoming-Colorado state line. A length of approximately 8 miles of Alternative I-B diverges to the southeast from Alternative I-A in this area to minimize potential impacts to areas eligible for historic trail designation.

Alternative I-B includes segments 1030, 1040, 1100, 1101, 1106, 1110, 1116, 1120, 1120.1, and 1187, and is approximately 158 miles in length, 67 percent of which would be located on BLM lands; 24 miles would be in BLM RMP utility corridors and 25 miles would be in WWEC corridors. There would be 204 miles of access routes associated with this alternative.









# Alternative I-C Transmission Line Route

This alternative was developed to reduce the overall proliferation of utility corridors and associated impacts by following existing designated utility corridors. Alternative I-C would begin by following Alternative I-A to near Creston, Wyoming, where Alternative I-C would turn south and parallel Wyoming State Highway 789 (SH-789) toward Baggs, Wyoming. From there, Alternative I-C would continue south, deviating from SH-789 to the east and passing east of Baggs. After crossing into Colorado, this alternative would parallel Colorado SH-13 into Craig, Colorado. Alternative I-C would pass east and south of Craig, turning to the west after crossing US-40, generally paralleling the highway and joining with Alternative I-A to the end of Region I.

Alternative I-C includes segments 1030, 1100, 1106, and 1190, and is approximately 186 miles in length, 44 percent of which would be located on BLM lands; 53 miles would be in BLM RMP utility corridors and 60 miles would be in WWEC corridors. There would be 237 miles of access routes associated with this alternative.

# Alternative I-D Transmission Line Route

Alternative I-D was developed to reduce multiple resource concerns, including impacts to visual resources and greater sage-grouse. It would follow the route of Alternative I-A, going west from Sinclair, Wyoming (Carbon County, Wyoming), basically paralleling I-80 in a designated WWEC, until turning south near Wamsutter. It would follow Alternative I-A south for approximately 15 miles. Alternative I-D then would diverge to the east, where it generally would parallel SH-789 at an offset distance of 2 to 5 miles to the west. Before reaching the Baggs area, Alternative I-D would turn west and follow the Shell Creek Stock Trail road for approximately 20 miles, where it would cross into Sweetwater County and again join Alternative I-A while turning south into Colorado (Moffat County).

Alternative I-D includes segments 1030, 1040, 1100, 1101, 1106, 1110, 1115, 1116, and 1187, and is approximately 168 miles in length, 70 percent of which would be located on BLM lands; 24 miles would be in BLM RMP utility corridors, and 25 miles would be in WWEC corridors. There would be 213 miles of access routes associated with this alternative.

#### Alternative Variations, Connectors, and Micro-siting Options

There are no alternative variations within Region I. The Region I alternative connectors were removed from further consideration at the request of the lead agencies in response to public comments received on the Draft EIS.

Two micro-siting options have been developed to address specific land use concerns in all Region I alternative routes related to the Tuttle Ranch Conservation Easement and the Cross Mountain Ranch proposed conservation easement.

- Tuttle Ranch Micro-siting Option 3 (segments 1103 and 1104); and
- Tuttle Ranch Micro-siting Option 4 (segments 1103 and 1105).

Both micro-siting options would replace segments 1101 and 1106. Tuttle Ranch Micro-siting Option 3 would avoid the Tuttle Ranch Conservation Easement, but would cross National Park Service (NPS)-owned land at Deerlodge Road west of US-40 and would cross the largest portion of the Cross Mountain Ranch property. Tuttle Ranch Micro-siting Option 4 would avoid the Tuttle Ranch Conservation Easement and the NPS-owned land at Deerlodge Road, and would cross the least amount of the Cross Mountain Ranch property.

# **Ground Electrode Locations**

One ground electrode system would be required within approximately 100 miles of the Northern Terminal to establish and maintain electrical current continuity during normal operations, and any unexpected outage of one of the two poles (or circuits) of the 600-kV DC terminal or converter station equipment. The ground electrode facility would consist of a network of approximately 60 deep earth electrode wells arranged along the perimeter of a circle expected to be about 3,000 feet in diameter. All wells at a site would be electrically interconnected and wired via approximately 10 low voltage underground cable "spokes" to a small control building. A low voltage electrode line would connect the ground electrode facilities to the AC/DC converter stations. General siting areas and conceptual alternative site locations have been identified in Region I; selection of specific location of the ground electrode systems would be identified during final engineering and design stages.

There are four potential locations for ground electrode systems in Region I (Bolten Ranch, Separation Flat, Separation Creek, and Eight Mile Basin). All locations would apply to all alternatives.

# 3.3.1.2 Region II

#### Alternative II-A Transmission Line Route (Proposed Action)

The TransWest proposed alignment would continue into Utah in a westerly direction, and then deviate south from US-40 toward Roosevelt, Utah. From Roosevelt, it would pass north of Duchesne, again paralleling US-40 for several miles, then turn southwest and cross the Uinta National Forest generally within a WWEC-designated utility corridor, then turn west along US-6 and Soldier Creek. At the junction with US-89, Alternative II-A would then turn south generally along US-89 where it would cross a portion of the Manti-La Sal National Forest. The alignment would pass through Salt Creek Canyon then north around Nephi. It would continue west and then turn southwest following a path north of and adjacent to IPP. Portions of this corridor have been identified as preferred in a joint resolution by representatives of Juab and Millard counties.

Alternative II-A includes segments: 1210, 1211, 1212, 1320.05, 1320.15, 1320.2, 1320.21, 1321.01, 1321.02, 1322.01, 1322.02, 1322.03, 1323.01, 1323.02, 1324, 1325, 1340, 1360, 1430.

Alternative II-A would be approximately 258 miles in length, 45 percent of which would be located on BLM/USFS NFS lands; 34 miles would be in BLM RMP utility corridors and 63 miles would be in WWEC corridors. There would be 395 miles of access routes associated with this alternative.

# Alternative II-B Transmission Line Route

Alternative II-B was developed to address impacts to private lands and to generally follow established utility corridors. These corridors are designated for underground utilities only and use of the corridor for the transmission line would require a plan amendment. The route would travel southwest in Colorado from the beginning of Region II, cross the Yampa River, and pass east of Rangely, Colorado. It would continue southwest where it would cross the Colorado-Utah state line and turn generally south, crossing back into Colorado in the Baxter Pass area. At that location, it would intersect the I-70 corridor, turning in a southwesterly and westerly direction, paralleling I-70. After passing south of Green River, Utah, Alternative II-B would diverge from I-70 and turn to the north along US-191. This highway generally would be followed until just south of the Emery-Carbon county line, where Alternative II-B would turn west and pass near the county line for approximately 25 miles, generally would turn south, pass west of Huntington, Utah, turn northwest, cross a portion of the Manti-La Sal National Forest, and pass northeast of Mount Pleasant, Utah. From there, it would pass through Salt Creek Canyon to Nephi, and then south around Nephi. It then would turn southwest and west adjacent to IPP, following a path south of Alternative II-A across a portion of the Fishlake National Forest.

Alternative II-B includes segments 1220, 1222.05, 1222.3, 1310, 1320.21, 1350, 1370, 1380, 1420, and 1440.

Alternative II-A would be approximately 346 miles in length, 65 percent of which would be located on BLM/USFS NFS lands; 136 miles would be in BLM RMP utility corridors and 33 miles would be in WWEC corridors. There would be 492 miles of access routes associated with this alternative.

# Alternative II-C Transmission Line Route

Alternative II-C also would decrease impacts to private lands and generally would follow established utility corridors as well as avoid USFS Inventoried Roadless Areas (IRAs). Alternative II-C would follow Alternative II-B through Colorado, along I-70 into Utah, and north at US-191. Approximately 15 miles north on US-191, Alternative II-C would diverge from Alternative II-B and turn in a general westerly direction toward Castle Dale. Approximately 3 miles east of Castle Dale, this alternative would turn south and roughly parallel Utah SH-10 at a distance of approximately 3 miles to the east. The alternative would cross SR-10 near the Emery-Sevier county line and turn west, again generally following the I-70 corridor across a portion of the Fishlake National Forest into the Salina, Utah, area. Alternative II-C would pass south of Salina, turn north, and parallel US-50 toward Scipio, Utah. The alternative would turn west and pass Scipio on the south, again crossing a portion of the Fishlake National Forest, then turn north, passing east of Delta, Utah, continuing into IPP.

Alternative II-C includes segments 1220, 1225.2, 1330.1, 1410, and 1440.

Alternative II-C would be approximately 365 miles in length, 67 percent of which would be located on BLM/USFS NFS lands; 146 miles would be in BLM RMP utility corridors, and 17 miles would be in WWEC corridors. There would be 488 miles of access routes associated with this alternative.

# Alternative II-D Transmission Line Route

This alternative was developed to avoid USFS IRAs and to provide additional northern route options to avoid impacts to historic trails and areas designated for special resource management along the southern routes (Alternatives II-B and II-C). It would begin along the same route as Alternative II-A. However, as it would enter Utah, it would diverge briefly to follow a designated utility corridor, causing it to zigzag once across Alternative II-A. It then would diverge to the south of the designated utility corridor and turn west-southwest, skirting the edge of the Ashley National Forest. Alternative II-D would cross into Carbon County northwest of Price, and then turn southwest in the Emma Park area along US-191. It would follow this highway west of Helper, across a portion of the Manti-La Sal National Forest and, then turn west toward Salt Creek Canyon where it would join and follow Alternative II-B, skirt the edge of the Uinta National Forest, then join and follow Alternative II-A into IPP.

Alternative II-D includes segments 1210, 1214, 1215, 1217.01, 1217.02, 1217.1, 1217.15, 1320.2, 1320.21, 1350, 1360, and 1430, and is approximately 259 miles in length, 57 percent of which would be located on BLM/USFS NFS lands; 71 miles would be in BLM RMP utility corridors, and 46 miles would be in WWEC corridors. There would be 422 miles of access routes associated with this alternative.

The route would cross one IRA, and an area eligible for Wild and Scenic River designation. The route also would pass through USFS Developed Recreation Sites (specifically, the Flat Canyon and Gooseberry Campgrounds).

# Alternative II-E Transmission Line Route

Alternative II-E also was developed to provide additional northern route options to address the previously mentioned resource impacts from the southern routes. This alternative would follow Alternative II-D into Utah and along the designated utility corridor, zigzagging across Alternative II-A. It then would rejoin Alternative II-A to continue west across the Uintah/Duchesne county line. Approximately 10 miles east of Duchesne, Alternative II-E would turn southwest and generally parallel SH-191, offset by 1 to 6 miles, through a utility window of the Ashley National Forest. At the Utah-Carbon county line, this alternative would turn west through the Emma Park area, then northwest along US-6 through a utility window of the

Uinta National Forest until it would rejoin with Alternative II-A, following its siting through the Manti-La Sal National Forest to Salt Creek Canyon. At this canyon, Alternative II-E would begin to follow the alignment of Alternative II-B south of Nephi, then join and follow Alternative II-A adjacent and into IPP.

Alternative II-E includes segments: 1210, 1214, 1215, 1215.05, 1217.051, 1217.052, 1219.4, 1320.05, 1320.15, 1320.21, 1325.1, 1325.2, 1350, 1360, and 1430.

Alternative II-E is approximately 268 miles in length, 44 percent of which would be located on BLM/USFS NFS lands; 40 miles would be in BLM RMP utility corridors, and 66 miles would be in WWEC corridors. There would be 412 miles of access routes associated with this alternative.

# Alternative II-F Transmission Line Route

Alternative II-F was adjusted in the Final EIS at the request of the lead agencies in response to public comments on the Draft EIS. This alternative combines portions of other alternatives in the region and contains unique segments in the Emma Park area that together would minimize impacts to USFS IRAs, Tribal and private lands, sage-grouse habitat, and avoid impacts to National Historic Trails. It would begin in southwest Moffat County (Colorado) by following Alternative II-A in designated WWEC and BLM utility corridors. As it enters Utah (Uintah County), it would separate from Alternative II-A to the northwest and follow the designated utility corridors, which then turn southwest and cross Alternative II-A. It then would diverge to the south off of the designated WWEC (still following the BLM-designated corridor) and turn west-southwest, crossing the Uintah and Ouray Indian Reservation. It then would cross into Duchesne County, where it would turn west-southwest out of the BLM utility corridor, skirt the Ashley National Forest, and generally follow the southern county line. The alternative would follow Argyle Ridge west and US-191 to the southwest for a short distance, then would turn west and follow the base of Reservation Ridge. It would then turn northwest and cross US-6 at Soldier Summit where it would turn west-northwest and follow US-6 to Thistle (Utah County) through a portion of designated WWEC and BLM utility corridors and utility window of the Uinta National Forest. It then would turn south, following US-89 for about 10 miles and through a portion of the Manti-La Sal National Forest before cutting southsouthwest (Sanpete County) to SR-132. At this highway, it would turn west into Nephi (Juab County) and follow a path south around the community and continue west until turning southwest where it would parallel US-6 north of Lynndyl for a short distance, then diverging west-southwest and finally west along the southern edge of the Millard-Juab county line into IPP north of Delta (Millard County); the end of Region II.

Alternative II-F includes segments: 1210, 1214, 1215, 1217.01, 1217.052, 1218, 1219.1, 1219.3, 1219.5, 1219.6, 1320.15, 1320.21, 1320.21, 1350, 1360, and 1430.

Alternative II-F is approximately 265 miles in length, 55 percent of which would be located on BLM/USFS NFS lands; 72 miles would be in BLM RMP utility corridors, and 31 miles would be in WWEC corridors. There would be 455 miles of access routes associated with this alternative.

#### Alternative II-G Transmission Line Route – USFS Selected Alternative

Alternative II-G is a reconfiguration of segments that also are included in multiple other alternatives, mainly Alternatives II-A and II-F. This specific alternative configuration was not included in the Draft EIS, but was developed and included in the Final EIS in response to agency concerns. This alternative avoids crossing Tribal trust lands of the Uintah and Ouray Indian Reservation, while also avoiding National Historic Trails, maximizing avoidance of potential habitat of federally protected plant species, and maximizing co-location with existing above-ground utilities. It would begin in southwest Moffat County (Colorado) by following the other alternatives in designated WWEC and BLM utility corridors. After entering Utah, this alternative would follow Alternatives II-F, II-D, and II-E and continue along the designated utility corridor, zigzagging across Alternative II-A. At this point, it would follow Alternative II-E to the northwest, and rejoin Alternative II-A to continue west across the Uintah/Duchesne county line. Alternative II-G would continue to follow Alternative II-A to near Fruitland. East of Fruitland it would

diverge from Alternative II-A and follow the Sink Draw Micro-siting Option, and then rejoin Alternative II-A. The alignment would then turn southwest and cross portions of the Uinta National Forest, then turn west along US-6 and Soldier Creek, rejoining Alternative II-F. At the junction with US-89, Alternative II-G would then turn south generally along US-89 where it would cross a portion of the Manti-La Sal National Forest. The alignment would pass through Salt Creek Canyon. Here Alternative II-G would again diverge from Alternative II-A and pass south around Nephi. It would continue west and then turn southwest following a path north of and adjacent to IPP. Portions of this corridor have been identified as preferred in a joint resolution by representatives of Juab and Millard counties.

Alternative II-G includes segments: 1210, 1211, 1212, 1320.05, 1320.15, 1320.2, 1320.21, 1321.01, 1321.02, 1322.21, 1322.22, 1322.23, 1322.51, 1323.02, 1324, 1325, 1350, 1360, and 1430.

Alternative II-G is approximately 252 miles in length, 45 percent of which would be located on BLM/USFS NFS lands; 32 miles would be in BLM RMP utility corridors and 63 miles would be in WWEC corridors. There would be 395 miles of access routes associated with this alternative.

#### Alternative Variations, Connectors, and Micro-siting Options

Micro-siting options for Alternative II-A and Alternative II-G have been developed on NFS lands to address concerns with construction in Uinta National Forest IRAs at a location where the designated WWEC offsets from a continual corridor: Strawberry IRA Micro-siting Option 2 (segment 1324.2) and Strawberry IRA Micro-siting Option 3 (segment 1324.4).Both of these micro-siting options would replace segment 1324.

Three micro-siting options for Alternative II-A and Alternative II-G also were developed and to address conflicts with siting through the Town of Fruitland, a Utah Division of Wildlife Resources conservation easement, and greater sage-grouse habitat:

- Fruitland Micro-siting Option 1: segments 1321.02, 1322.51, 1322.52, 1322.53, and 1323.01.
- Fruitland Micro-siting Option 2: segments 1321.02, 1322.01, 1322.11, 1322.12, 1322.22, and 1322.23.
- Fruitland Micro-siting Option 3: segments 1322.23, and 1322.71.

For Alternative II-G, each of these of these micro-siting options would replace segments 1321.02, 1322.01, 1322.02, and 1323.01. For Alternative II-G, each of these micro-siting options would replace segments 1321.02, 1322.21, 1321.22, 1322.23, and 1322.51.

East of Nephi, the Salt Creek Canyon Reroute Micro-siting Option was developed per input from private landowners. This micro-siting option was incorporated into the Final EIS through the USFS' Addendum to the Final EIS (2017). The Salt Creek Canyon Reroute Micro-siting Option would take the place of portions of segments 1320.2, 1320.21, and 1350, which are all portions of Region II Alternatives A, D, E, F, and G.

One alternative variation (Reservation Ridge Alternative Variation, segment 1219.2) was developed to minimize potential impacts to greater-sage grouse issues along comparable portions of Alternative II-F (segments 1219.5 and 1219.6).

# 3.3.1.3 Region III

# Alternative III-A Transmission Line Route (Proposed Action)

The TransWest proposed alignment would leave IPP to the west and turn south toward Milford, Utah, following the WWEC. For the remainder of Utah, the alignment roughly would parallel I-15 approximately 20 miles west of the highway. The alignment would pass west of Milford, then generally trend

south-southwest, passing east of Enterprise, Utah, across a portion of the Dixie National Forest, and directly west of Central, Utah; exiting Utah just north of the southwest corner of the state. In Nevada, the alignment would cross I-15 west of Mesquite, Nevada, and remain on the south side of I-15 until reaching the North Las Vegas area northeast of Nellis Air Force Base

Alternative III-A includes segments: 1450, 1470, 1480, 1500, 1500.02, 1500.05, 1501.1, 1501.15, 1502.5, 1530, 1550.1, 1550.2, 1560, and 1600. Alternative III-A is approximately 276 miles in length, 84 percent of which would be located on BLM/USFS NFS lands; 67 percent of the route would be within a designated RMP or WWEC corridor (107 miles and 158 miles, respectively). There would be 335 miles of access routes associated with this alternative.

# Alternative III-B Transmission Line Route

Alternative III-B was developed to decrease resource impacts in southwestern Utah (including potential impacts to the Mountain Meadows National Historic Landmark and Site and IRAs in the Dixie National Forest). It would begin following Alternative III-A through Millard and Beaver counties. Near the Beaver-Iron county line, it would diverge toward the west. Alternative III-B would follow a west-southwest course, crossing into Lincoln County, Nevada, near Uvada, Utah, where it would turn to a general southerly direction, rejoining Alternative III-A to the northwest of Mesquite. It then would diverge to the west from Alternative III-A approximately 16 miles west of Mesquite, cross into Clark County, pass southeast of Moapa, Nevada, pass through the designated utility corridor on the Moapa Reservation, and rejoin Alternative III-A approximately 4 miles north of the end of Region III.

Alternative III-B includes segments: 1450, 1470, 1480, 1490, 1490.05, 1510, 1530, 1540.1, 1540.2, 1590, and 1600. Alternative III-B is approximately 284 miles in length, 74 percent of which would be located on BLM lands; 54 percent of the route would be within a designated RMP or WWEC corridor (103 miles and 80 miles, respectively). There would be 320 miles of access routes associated with this alternative.

# Alternative III-C Transmission Line Route

Alternative III-C also was developed to address the same resource impacts as Alternative III-B and to take advantage of an existing corridor with existing transmission line development, thereby potentially consolidating cumulative transmission line impacts. This alternative would follow Alternatives III-A and III-B before diverging from them shortly after traveling west out of IPP, where it would follow the existing IPP power line to the south for approximately 30 miles and then would rejoin Alternative III-B to the Utah-Nevada state line. After passing into Nevada at Uvada, Alternative III-C would turn west away from Alternative III-B, passing north of Caliente, Nevada; turning south approximately 15 miles west of Caliente. This alternative would follow that southern course, intersecting with US-93 and paralleling the highway for all but the last 15 miles into North Las Vegas. Alternative III-C would rejoin Alternative III-A northeast of Nellis Air Force Base at the end of Region III.

Alternative III-C includes segments: 1450, 1460, 1480, 1490, 1490.05, 1520, and 1610. Alternative III-C is approximately 308 miles in length, 83 percent of which would be located on BLM lands; 63 percent of the route would be within a designated RMP or WWEC corridor (160 miles and 121 miles, respectively). There would be 338 miles of access routes associated with this alternative.

# Alternative III-D Transmission Line Route

Alternative III-D was developed as a minor reconfiguration to Alternative III-B for the purpose of decreased resource impacts in southwestern Utah (including potential impacts to the Mountain Meadows National Historic Landmark and Site and IRAs in the Dixie National Forest) as well as addressing concerns raised by the Department of Defense. It would begin following Alternative III-B then diverge through Millard County to maintain co-location with the existing IPP power line to the south for approximately 30 miles, and then rejoin Alternative III-B through the remainder to the Region III.

Alternative III-D includes segments: 1450, 1460, 1480, 1490, 1490.05, 1510, 1530, 1540.1, 1540.2, 1590, and 1600. Alternative III-D is approximately 281 miles in length, 75 percent of which would be located on BLM/USFS NFS lands; 55 percent of the route would be within a designated RMP or WWEC corridor (137 miles and 50 miles, respectively). There would be 303 miles of access routes associated with this alternative.

# Alternative Variations, Connectors, and Micro-siting Options

Three alternative variations were developed to address potential impacts to the Mountain Meadows National Historic Landmark resulting from Alternative III-A: the Ox Valley East Variation (segments 1503, 1503.5, and 1505), the Ox Valley West (segments 1503.5, 1504, and 1505) and the Pinto Alternative Variation (segment 1506). Each of these variations would replace segments 1501.1 and 1501.15 of Alternative III-A.

Three alternative connectors also were developed in Region III to provide the flexibility to combine alternative segments to address resource conflicts. One connector could be used with Alternative III-A, two connectors could be used with Alternative III-B and III-D, and one could be used with Alternative III-C.

# **Ground Electrode Locations**

There are five potential locations for ground electrode systems in Region III. Three of the locations would apply to Alternative III-A, Alternative III-B, or Alternative III-D (Mormon Mesa-Carp Elgin Road, Halfway Wash - Virgin River, and Halfway Wash East); one would apply only to Alternative III-C (Meadow Valley 2); and one would apply only if Design Option 2 was to be implemented (Delta).

# 3.3.1.4 Region IV

# Southern Terminal

The Southern Terminal facilities would be located in the Eldorado Valley on private land, within the city limits of Boulder City, in Clark County, Nevada. The Southern Terminal would include an AC/DC converter station and adjacent AC substation. The AC/DC converter station would include a 600-kV DC switchyard and a converter building containing power electronics and control equipment.). The Southern Terminal would connect to all four of the existing 500-kV substations (Eldorado, Marketplace, Mead, and McCullough) located at the Marketplace Hub. Connections to the existing transmission infrastructure at the Mead and Marketplace substations would be via the existing Mead-Marketplace 500-kV transmission line, and connections to the Eldorado and McCullough substations also would be constructed. The three major components (AC/DC converter station, 500-/230-kV AC substation, and 230-kV AC substation) are planned to be co-located and contiguous.

# Alternative IV-A Transmission Line Route (Proposed Action)

The TransWest proposed action would follow a designated WWEC following existing transmission lines running to the south, passing North Las Vegas to the east, and through the Rainbow Gardens area. It would run between Whitney, Nevada, and the Lake Las Vegas development skirting the edge of Henderson, Nevada. It would then turn in a general southwest direction at Railroad Pass, and then in a southern direction to the Marketplace endpoint.

Alternative IV-A includes segments: 1620, 1630, 1660, 1700, 1740, 1790, and 1830. Alternative IV-A is approximately 37 miles in length, 92 percent of which would be located on federally managed lands. There would be 11 miles of BLM RMP corridors and 14 miles of designated WWEC. There would be 49 miles of access routes associated with this alternative.

# Alternative IV-B Transmission Line Route

Alternative IV-B would follow the proposed alternative for approximately 7 miles, diverge to the southeast as it passed directly east of Nellis Air Force Base, and travel south through the Lake Mead National Recreation Area, passing between the Lake Las Vegas development and Lake Mead. Along the south edge of Lake Las Vegas, it would turn southwest, north of the Boulder City, Nevada, then turn west and join with Alternative IV-A west of Henderson to the Marketplace endpoint. This alternative was originally developed to provide an alternative that did not require crossing the recent congressionally released Sunrise Mountain Instant Study Area (ISA).

Alternative IV-B includes segments: 1620, 1640, 1670, 1710, 1750, 1760, 1772, 1800, 1820, and 1830. Alternative IV-B is approximately 40 miles, 55 percent of which would be located on federally managed lands. There would be 5 miles of BLM RMP corridors and 5 miles of designated WWEC There would be 51 miles of access routes associated with this alternative.

# Alternative IV-C Transmission Line Route

Alternative IV-C would decrease impacts to populated areas. This alternative would follow Alternative IV-B through the Lake Mead National Recreation Area and between the Lake Las Vegas development and Lake Mead to north of Boulder City. It would then continue south before it turned southwest around the southeast edge of the metropolitan area of Boulder City, and into the Marketplace endpoint. It also was originally developed to provide an alternative that did not require crossing the recent congressionally released Sunrise Mountain ISA.

Alternative IV-C includes segments: 1620, 1640, 1670, 1710, 1750, and 1771. Alternative IV-C is approximately 44 miles in length, 55 percent of which would be located on federally managed lands. There would be 5 miles of BLM RMP corridors and 5 miles of designated WWEC. There would be 54 miles of access routes associated with this alternative.

# Alternative Variations, Connectors, and Micro-siting Options

One alternative variation (the Marketplace Variation, segment 1810) was developed to address impacts to private lands. This variation would replace segment 1820 of Alternative IV-B.

Five alternative connectors were developed in Region IV to provide the flexibility to combine alternative segments to address resource conflicts. Each of the five connectors could be used with Alternative IV-B and four would be used with Alternative IV-C.

# 3.3.2 Alternate Development Design Options

# 3.3.2.1 Design Option 2

If Design Option 2 was implemented, the Northern Terminal would be constructed as in the Proposed Action. The Southern Terminal would be relocated to the IPP in Millard County near Delta, Utah. A series compensation station would be necessary along the AC-configured alternative routes of Region III. There are three potential sites, each corresponding to a specific alternative route. Additional studies would be performed to identify specific locations.

# 3.3.2.2 Design Option 3

If Design Option 3 was implemented, a substation would be constructed near IPP under Phase 1 and the Southern Terminal would be constructed in Nevada under phase two.

A series compensation station would be necessary along the alternative routes of Region II during the first phase (AC operation). There are three potential sites, each corresponding to specific alternative routes. Series Compensation Station 1 corresponds to Alternatives II-A and II-E, and would be located near the Uintah-Duchesne County line approximately 7 miles east of the Town of Roosevelt, Utah, and

2 miles south of US-40. Series Compensation Station 2 corresponds to Alternatives II-B and II-C, and would be located approximately 5 miles west of the Utah-Colorado State line on the north side of I-70. Series Compensation Station 3 corresponds to Alternatives II-D and II-F, and would be located in the Uinta Basin area approximately 8 miles west of the Green River and near the Uintah- Duchesne County line. Additional studies would be performed to identify specific locations. Upon completion of Phase 2 of Design Option 3, when the utility of the station ceased, the site would be deconstructed and reclaimed to the original condition.

Design Options 2 and 3 currently do not meet the interests and objectives of the Project because capacity currently is not available on the Southern Transmission System. Therefore, implementation of the design options only would be considered if sufficient capacity (approximately 1,500 MW) became commercially available to transmit energy delivered by the Project to California, and if commercial interconnection agreements with the utility owning and operating the IPP transmission line (currently Los Angeles Department of Water and Power) could be established. Should the Project be approved and one of the design options selected by the Applicant, it will not be necessary to revisit the USFS consultation for this Project because the options will not result in changes to disturbances on NFS lands.

#### 3.3.3 Land Use Plan Amendments

**Table 1** summarizes the proposed LRMP amendments for the National Forests that would be crossed by the Project alternatives. BLM land use amendments also would be required for the Project. Both USFS and BLM's potential land use plan amendments are described in detail in Sections 4.1.1 and 4.4 of the Final EIS. BLM's plan amendments are not part of this decision. Amendments are needed for the Uinta National Forest LRMP and the Manti-La Sal LRMP under the USFS Selected Alternative.

Table 1 USFS Land Use Plan Amendment Considerations and Recommendations<sup>1</sup>

National Forest	Affected Management Plans	Alternatives Requiring Amendment	Area of Resource Conflict or Amendment Consideration	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Alternative G	Alternative Connectors	Alternative Variations
Ashley National Forest	Ashley National Forest LRMP (Nov 1986)	Reservation Ridge Alternative Variation	Utility Corridor Restriction <sup>2</sup> / ROW Exclusion Area	N/A	N/A	N/A				N/A	N/A	N/A
			Conflict with Resource Objectives, Stipulations, Standards, Guidelines <sup>3</sup>	N/A	N/A	N/A				N/A	N/A	X-visual <sup>1</sup>
			Amendments to Accommodate RFFA Projects	N/A	N/A	N/A				N/A	N/A	N/A
Uinta National Forest Planning Area <sup>7</sup>	LRMP Uinta National Forest (May 2003)	A, E, F, G, Reservation Ridge Alternative Variation	Utility Corridor Restriction <sup>2</sup> / ROW Exclusion Area	X <sup>1</sup>	N/A	N/A	N/A	X <sup>1</sup>	X <sup>1</sup>	X <sup>1</sup>	X <sup>1</sup>	N/A
			Conflict with Resource Objectives, Stipulations, Standards, Guidelines <sup>3</sup>	X-visual <sup>6</sup>	N/A	N/A	N/A	X-visual <sup>6</sup>	X-visual <sup>6</sup>	X-visual <sup>6</sup>	X-visual <sup>6</sup>	N/A
			Amendments to Accommodate RFFA Projects		N/A	N/A	N/A				N/A	N/A
Manti-La Sal National Forest	LRMP Manti-La Sal National Forest (Nov 1986)	A, B, D, E, F, G	Utility Corridor Restriction <sup>2</sup> / ROW Exclusion Area			N/A					N/A	N/A
			Conflict with Resource Objectives, Stipulations, Standards, Guidelines <sup>3</sup>	X-visual <sup>5</sup>	X-visual <sup>1</sup>	N/A	X-visual <sup>1</sup>	X-visual <sup>5</sup>	X-visual <sup>5</sup>	X-visual <sup>5</sup>	N/A	N/A
			Amendments to Accommodate RFFA Projects			N/A					N/A	N/A
Fishlake National Forest	Fishlake National Forest LRMP (Jun 1986)	С	Utility Corridor Restriction <sup>2</sup> / ROW Exclusion Area	N/A			N/A	N/A	N/A	N/A	N/A	N/A
			Conflict with Resource Objectives, Stipulations, Standards, Guidelines <sup>3</sup>	N/A		X-visual <sup>1,4,5</sup>	N/A	N/A	N/A	N/A	N/A	N/A
			Amendments to Accommodate RFFA Projects	N/A			N/A	N/A	N/A	N/A	N/A	N/A
Dixie National Forest	National Forest (Sept 1986)	Ox Valley East, Ox Valley West, Pinto Alternative Variations	Utility Corridor Restriction <sup>2</sup> / ROW Exclusion Area		N/A	N/A	N/A	N/A	N/A	N/A	N/A	
			Conflict with Resource Objectives, Stipulations, Standards, Guidelines <sup>3</sup>		N/A	N/A	N/A	N/A	N/A	N/A	N/A	X-visual <sup>1</sup>
			Amendments to Accommodate RFFA Projects		N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Non-conformance/inconsistency issues identified require a plan amendment before the Project could proceed, if approved.

<sup>&</sup>lt;sup>2</sup> Non-conformance/inconsistency issues related to utility corridors were only identified for agency plans that have restrictions to locating ROWs within corridors or the designated corridor was identified for underground only utilities.

<sup>3</sup> Resource conflicts were identified from affected management plans; however, these issues do not necessarily require a plan amendment as some issues allow exceptions in the current plan.

<sup>&</sup>lt;sup>4</sup> Non-conformance issues as they pertain to visual resources on BLM-administered lands include areas of VRM Class I and II outside of designated utility corridors. Inconsistency issues as they pertain to visual resources on USFS-administered lands includes areas of VQO Preservation, Retention, and Partial Retention or Scenic Integrity Objective (SIO) Very High and High that is not co-located with existing transmission or within a designated utility corridor.

<sup>&</sup>lt;sup>5</sup> Areas that would conflict with VQOs; however, these areas are either located within a designated utility corridor, co-located with existing overhead transmission, or could be mitigated so as to not conflict with the current management plan for the area. Therefore, plan amendments for these conflicts are not necessarily required, but are mitigated as determined by federal land managers.

<sup>&</sup>lt;sup>6</sup> Through discussions with federal land managers and information considered, it was determined that a plan amendment was not necessary to address the conflicts identified. These resource conflicts could be addressed through other measures, including exceptions, as allowed through the current area plan.

In March 2008, the Uinta National Forest and the Wasatch-Cache National Forest were combined into one administrative unit (Uinta-Wasatch-Cache National Forest). Each of these forests continues to operate under individual forest plans approved in 2003. The term "Uinta National Forest Planning Area" is used to refer to the portion of the Uinta-Wasatch-Cache National Forest managed under the 2003 LRMP for the Uinta National Forest.

#### 3.4 Alternatives Considered but Not Analyzed in Detail

During scoping, numerous questions were raised regarding the ability to route the transmission line, or portions of the transmission line, underground. Underground cable systems have been considered and evaluated for the Project; however, there are substantial issues with undergrounding that make it unsuitable for very long transmission lines crossing the multiple physiographic areas that the Project crosses. The length of the Project and the fact that it crosses large areas of undisturbed habitat with large variations in topography raises several environmental, technical, and economic issues. These include the following.

- Economic Issues Undergrounding increases the costs of a transmission line from 12 to 17 times over an overhead transmission line. In the case of the TWE Project, this would make Project construction economically infeasible.
- Technical Issues Burying long, high-voltage transmission lines requires consideration of two key issues: 1) providing sufficient insulation so that cables can be within inches of grounded material; and 2) dissipating the heat produced during the operation of the electrical cables. Addressing these issues required the use of special fluid-filled or gas-filled pipe or the use of solid cable with cross-linked polyethylene. These systems have the potential for fluid leaks or corrosion that can cause additional environmental concerns or have potential long-term maintenance requirements. The use of undergrounding requires installation of ancillary facilities, including large buried vaults for cable splicing and maintenance. The vaults are large concrete boxes approximately 10 x 10 x 30 feet, and, depending on the type of cable used, they would be required every 900 to 2,000 feet along the entire length of the transmission lines. For large voltage lines such as the Project, two vaults may need to be constructed next to each other at each of these intervals.
- Environmental Issues Burying the TransWest transmission line and required ancillary facilities (such as vaults) would require continuous excavation through all habitat types along the entire length of the transmission line. This would result in large-scale impacts related to visual resources, habitat loss, erosion, and sedimentation.

Based on the technical, economic, and environmental impact issues described above, undergrounding all or portions of the Project was not considered for further analysis.

Commenters also have suggested that "double-hanging" this Project on existing transmission line structures should be considered. The Project's Technical Subcommittee, consisting of representatives from both Western and TransWest, considered the feasibility of using common structures. It determined that the 3,000-MW capacity is the limit of a single transmission system element that can meet reliability standards of North American Electric Reliability Corporation and WECC. Additionally AC and DC systems are incompatible on shared structures because of interference from the electro-magnetic fields created by AC circuits.

A number of corridor segments were considered through the public scoping period, but subsequently have been eliminated from detailed analysis in this EIS by the lead agencies. Additionally, certain segments and ground electrode sites included in the Draft EIS were removed because that analysis determined they provided no benefits beyond the existing range of alternatives or had equal or greater impacts to alternatives being retained for detailed analysis. Table 2-22 in the Final EIS identifies the segments and notes the rationale for elimination from detailed analysis.

# 4.0 Consistency with Federal Agency Policy and Other Programs

#### 4.1 U.S. Forest Service

#### 4.1.1 Forest Plan Compliance

The USFS land use planning regulations (36 CFR 219.15) require that project-specific decisions, including authorized uses of land, conform to or be consistent with the applicable LRMP. If a proposed project-specific decision is not consistent with or conforms to the applicable LRMP, the responsible official may modify the proposed project to make it conform or be consistent with the LRMP, reject the proposal, amend the LRMP such that the action will conform or be consistent with the LRMP as amended, or amend the LRMP contemporaneously with the approval of the project so that the project is consistent with the LRMP as amended and limited to apply only to the project. As a result, amendments of multiple USFS LRMPs may be necessary before the Project could proceed, if approved.

The USFS plan amendments are subject to public review and procedures outlined in federal regulations (36 CFR 219.16). For a plan amendment that is approved in the decision document approving the project, and the amendment applies only to the project, the public notification requirements of 36 CFR part 218, subpart A applies (36 CFR 219.16(b)). Pursuant to these regulations, outreach activities (see Chapter 6.0 in the Final EIS) were conducted to gather public input on the Project and proposed amendments, planning criteria were developed and circulated for use in evaluating the amendments, and an analysis of the plan amendments was incorporated into this EIS. For the USFS, when a plan amendment that is approved in a decision document approving a project or activity and that applies only to one specific project or activity, the administrative review process for the project or activity applies (36 CFR 219.17(b)(3), 36 CFR 219.51(c) and 36 CFR 219.59(b)). In this case, the administrative review process would be the objection process at 36 CFR Part 218.

For the Project, each potential situation of non-conformance or inconsistency by proposed and alternative routes as well as associated Project components was identified through a comparison to the respective land use plan. A plan amendment that would allow authorization of the proposed or alternative route was presented as the proposed plan amendment for that situation. Land use planning regulations require that the Draft EIS identify the "agency preferred alternative," or those plan amendments that best meet multiple use and sustained yield mandates of FLPMA and the NFMA. The Final EIS, as amended by the USFS Final EIS Addendum (Appendix A to this ROD), identifies the "proposed amendments," or the amendments that the USFS proposes to implement for the selected alternative. Plan amendments would only be implemented as described for the Project routes that are authorized under this decision. The plan amendments for the Uinta-Wasatch-Cache National Forest were identified in the Draft EIS; and the specific Manti-La Sal National Forest plan amendment for Region II Alternatives A, C, E, F, and G has been incorporated into the Final EIS as new information to this EIS per the USFS Final EIS Addendum. For the USFS, under 36 CFR 219.16(b), when a plan amendment is approved in a decision document approving a project or activity and the amendment applies only to the project or activity, the notification requirements for the project or activity applies. The required 45-day opportunity for comment on the Draft EIS was provided. Comments received on the plan amendments during these comment periods were considered and adjustments were made as appropriate in the Final EIS (see Appendix L, Draft EIS Response to Comments).

The LRMP amendments for the National Forests that are crossed by the Project alternatives are described in Section 3.3.3 of this ROD.

#### 4.1.2 Determination of Non-significance of Plan Amendments

The plan amendments required for the Selected Alternative (II-G) within the Uinta National Forest Planning Area and the Manti-La Sal National Forest do not change the long-term relationship between

levels of multiple-use goods and services originally projected. The Uinta National Forest Planning Area amendment allows a one-time exception for one high-voltage transmission line (paralleling the existing transmission line) for the approximate 18-mile length where the Project would not meet the scenery resource management requirement in the Uinta National Forest LRMP. The Manti-La Sal National Forest plan amendment allows a change of VQO classification for 21 acres where the Project would cross. Provision for energy transmission corridors and their management are currently in the respective LRMPs. Based on the analysis of project effects disclosed in the Final EIS, the activities allowed by approving the amendments do not preclude meeting desired conditions, goals, and objectives for other resources and uses provided for under the respective LRMPs. No changes would occur in the long term relationship between levels of multiple-use goods and services from those originally projected.

In addition, the plan amendments for the Uinta National Forest Planning Area or the Manti-La Sal National Forest would not result in a significant effect on the entire LRMPs or affect land and resources throughout a large portion of the respective planning areas during the respective planning periods. The amendments do not remove existing direction in the respective LRMPs, and they only amend one standard per LRMP for the Project. The affected area of the plan amendment within Uinta National Forest Planning Area is approximately 550 acres. This estimate is based on an 18-mile ROW length and width of 250 feet within the Uinta National Forest Planning Area. The Uinta National Forest Planning Area is over 800,000 acres; therefore, this affected area would be less than 0.1 percent of the Uinta National Forest Planning Area. The affected area of the plan amendment within the Manti-La Sal National Forest is approximately 621 acres, based on Geographic Information Systems delineation of the TWE Project ROW across NFS lands. The Manti La-Sal National Forest is over 1.4 million acres; therefore, this affected area would be less than 0.01 percent of the lands under the jurisdiction of the Manti La-Sal National Forest. Neither of these represents a large portion of the respective planning areas.

Based on the above, I have determined that the amendments I am approving for the Uinta National Forest LRMP and the Manti-La Sal National Forest LRMP are not significant amendments, and therefore the regulations found under 36 CFR 218 apply.

#### 4.2 Other Laws

#### 4.2.1 Endangered Species Act

Under the provisions of section 7(a)(2) of the ESA, a federal agency that carries out, permits, licenses, funds, or otherwise authorizes an activity must consult with the U.S. Fish and Wildlife Service (USFWS) as appropriate to ensure the action is not likely to jeopardize the continued existence of any species listed under the ESA or result in the destruction or adverse modification of designated critical habitat. Informal consultation for the proposed Project began with the submittal of written correspondence to the USFWS from the BLM in July 2009. A biological resources coordination meeting was held at the BLM Wyoming State Office on January 19, 2010, with participation by the BLM, USFWS, and AECOM. The purpose of the meeting was to define the coordination and communication process for developing lists of special status species including federally listed species. On August 25, 2010, the USFWS responded with a list of threatened and endangered species and species proposed or candidates for listing with potential to occur within the TWE Project action area.

In early 2011, the USFWS, BLM, USFS, Bureau of Indian Affairs (BIA), and U.S. Army Corps of Engineers, federal agencies with the authority and responsibility to perform certain actions associated with the proposed Project, entered into a Consultation Agreement. Additional federal agencies signed the Agreement in 2013 (i.e., Utah Reclamation Mitigation and Conservation Commission, NPS). The Agreement addresses interagency coordination for the affirmative conservation and recovery of listed species under Section 7(a)(1) of the ESA. Section 7(a)(1) directs all federal agencies to use their authorities in furtherance of the purposes of the ESA by "carrying out programs for the conservation and recovery of listed species." Pursuant to Section 7 (a)(1), the Agreement clarifies agency roles during

consultation under Section 7(a)(2) for the direct, indirect, and cumulative effects of the Proposed Action on listed species, species proposed for listing, and their associated designated or proposed critical habitat. In coordination with appropriate state natural-resource management agencies that have trust authority for non-listed species, the Agreement also speaks to interagency coordination for the conservation of, and assessment of effects on, candidate species that may be affected by the Proposed Action.

On January 21, 2014, the BLM, Western, USFS, and AECOM met with USFWS representatives to discuss the TWE Project Section 7 consultation. Prior to that meeting, AECOM provided the USFWS with a draft BA outline and a screening matrix and updated list of species proposed to be carried forward in the BA. On February 21, 2014, the USFWS sent a letter to the lead agencies confirming the list of species to be addressed in the BA, providing general and species-specific recommendations for those species and detailed comments on the BA outline.

Pursuant to Section 7(c)(1) of the ESA, the BLM and Western, in conjunction with the appropriate cooperating agencies, prepared a BA to initiate formal consultation with the USFWS and fulfill agency obligations under Section 7(a)(2) of the ESA for the Selected Alternative route. The BLM and Western worked collaboratively with the USFWS to ensure that the USFWS has an appropriate amount of time to review the information contained in the BA and prepare a BO prior to completion of a ROD or any irreversible or irretrievable commitment of resources by the Applicant. The BO is included in this ROD as **Appendix G**.

## 4.2.2 Bald and Golden Eagle Protection and the Migratory Bird Treaty Acts and Executive Order 13186

BLM, Western, and USFS have entered into MOUs with USFWS as directed under Executive Order (EO) 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds) in order to promote interagency conservation efforts. Interagency coordination regarding migratory bird conservation among the BLM, Western, USFS, USFWS, state wildlife agencies, and other stakeholders was completed throughout the development of the EIS via meetings, conference calls, letters, and e-mail correspondence. Complete analysis of potential impacts to migratory bird species covered under the Migratory Bird Treaty Act in addition to further analysis of species identified as species of conservation priority by USFWS is located in Section 3.22 of the Final EIS. The analysis regarding migratory birds presented in the Final EIS is compliant with the terms of both memorandum and EO 13186. TransWest has committed to implementing design features during construction and operation of the Project that ensure consistency with Avian Power Line Interaction Committee (APLIC) recommendations (APLIC 2012, 2006) and has prepared an Avian Protection Plan, which is included as Appendix B of the ROD POD (see Appendix B of this ROD). The BLM, Western, and USFS anticipate determining mitigation approaches to address potential impacts to migratory bird habitat in collaboration with the USFWS, state wildlife agencies, and local stakeholders during the final site specific design process. These would be included in a finalized Appendix B of the NTP POD.

#### 4.2.3 National Historic Preservation Act

Section 106 of the NHPA (16 USC § 470f) requires federal agencies to take into account the effect of their undertakings on historic properties listed in or eligible for the National Register of Historic Places (NRHP), which may include any prehistoric or historic district, site, building, structure, or object.

Regulations for the implementation of Section 106 are defined in 36 CFR Part 800 – Protection of Historic Properties. The Section 106 process seeks to accommodate historic preservation concerns with the needs of federal undertakings through consultation among the agency official and other parties with an interest in the effects of the undertaking on historic properties (36 CFR 800.1). These parties include the Advisory Council on Historic Preservation (ACHP), State Historic Preservation Officer (SHPO), Indian Tribes, Tribal Historic Preservation Officers, state and other federal agencies, and individuals or organizations with a demonstrated interest in the undertaking due to their legal or economic relation to

the undertaking or affected properties, or their concern with the effects of undertakings on historic properties (36 CFR 800.2).

To achieve compliance with Section 106, a PA among BLM, Western, USFS, ACHP, Bureau of Reclamation, BIA, NPS, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, TransWest, and the Wyoming, Colorado, Utah, and Nevada SHPOs was developed as allowed in 36 CFR 800.14 b(1) (ii) when effects on historic properties cannot be fully determined prior to approval of the undertaking. The PA outlines general and specific measures the federal agencies will take to fulfill their objectives and responsibilities regarding the protection of historic properties under the NHPA. As part of the PA process, the BLM and Western sent letters to local governments, organizations, agencies, interested parties, and Native American Tribes inviting them to be consulting parties to the agreement. Consulting parties participated in development of the PA through face-to-face meetings in 20111 and 2014 as well as regular conference calls throughout the PA development process. A complete description of development of the PA can be found in the Final EIS (Chapter 6.0, Section 6.2.3.2)

The signature process for the Final Draft PA was completed on March 12, 2015. The PA, which contained as **Appendix H** of this ROD, contains a list of all signatories, required signatories and concurring parties. All parties signing the PA agree that TransWest Express will be administered in accordance with stipulations and measures set forth in the PA. Note that Appendix D of the NTP POD will be updated with information contained within the executed PA.

#### 4.2.4 Executive Order 13175

Government-to-government consultations were conducted to comply with the requirements of Section 106 of the NHPA and the ACHP's regulations when planning and carrying out their undertakings. These consultations involved Native American Tribes, SHPOs, local government entities, and other interested parties, depending on the specifics of the undertaking. Such consultation with Native American Tribes is central to the Section 106 process. Guidance documents for Tribal Government-to-Government consultation include, but are not limited to, EO 13175, Secretarial Order 3206, and DOI Policy on Consultation with Indian Tribes. As the lead for Government-to-Government and Section 106 consultations, the BLM sent letters to tribes and consulting parties, offering consultation opportunities regarding this Project. BLM managers, as well as line officers from other federal agencies such as Western and USFS, participated in multiple meetings with tribes. Tribal consultation occurred with 48 federally recognized Native American tribes that resided in or had cultural ties to the Project analysis area. Details of the consultation process are described in Section 6.2.3.1 of the Final EIS. Consultation with the tribes and pueblos will continue throughout the Project as stipulated under EO 13175, November 6, 2000.

#### 4.2.5 Clean Air Act

The Federal Clean Air Act (CAA) amendments require all states to control air pollution emission sources so that National Ambient Air Quality Standards (NAAQS) are met and maintained. The NAAQS are established by the USEPA and represent maximum acceptable concentrations that generally may not be exceeded more than once per year, except the annual standards, which may never be exceeded. The NAAQS that were evaluated for the Project included carbon monoxide, particulate matter, sulfur dioxide, nitrogen oxide, and ozone. Details of the air quality impact analysis are provided in Section 3.1.6 of the Final EIS. The impact conclusion for air quality is that Project construction and operation activities are consistent with current federal and state air quality regulations. The Selected Alternative also would not cause adverse impacts to resources with Air Quality Related Values or exceed federal or state general conformity thresholds.

#### 4.2.6 Clean Water Act, Executive Order 11988, and Executive Order 11990

The CWA, EO 11988 (Floodplain Management), and EO 11990 (Wetland Protection) are regulations that protect the water quality in waters of the U.S., as well as floodplains and wetlands. Section 402 of the

CWA created the National Pollutant Discharge Elimination System, which is administered by most individual states and includes storm water permits and requirements for construction areas. Section 404 of the CWA regulates dredging and filling of waters of the U.S., with permits issued by the USACE. The construction and operation of the Selected Alternative would comply with the requirements of EO 11988, EO 11990, and Sections 402 and 404 of the CWA through effective implementation of design features, BMPs, and proposed mitigation (refer to Sections 3.4.6, Impacts to Water Resources; and 3.5.6, Impacts to Vegetation Resources of the Final EIS).

#### 4.2.7 Environmental Justice (Executive Order 12898)

EO 12898 requires each Federal agency to make achieving environmental justice part of its mission. Potential environmental justice populations are not expected to be disproportionately affected by impacts associated with construction of the Project (refer to Section 3.17.6 of the Final EIS).

#### 4.2.8 Roadless Area Conservation Rule

IRAs are identified as areas of NFS land currently inventoried for planning purposes as roadless. The 2001 Roadless Area Conservation Rule (36 CFR 294.13(b)(2)) prohibits road construction, road reconstruction, and timber harvesting on IRAs on NFS lands. The Roadless Rule does not prohibit special use developments such as transmission lines, nor does it strictly prohibit multiple use activities on these lands. Pursuant to prior NFMA implementing regulations at 36 CFR 219.17 (as published in 36 CFR 200 to 299 [July 1, 2000 edition]), and using inventory procedures found in FSH 1909.12, Chapter 71, the national forests each created an inventory of draft Unroaded/Undeveloped Areas (URUD) areas. These were formally initiated with NOIs in 2002 (Federal Register 11 67[90]:31178 and 67[91]:31761, respectively), with the purpose of identifying potential wilderness areas in the NFS during upcoming LRMP revision efforts.

A total of 17 IRAs are located on NFS lands within the Project analysis area. Impact analysis for the IRAs associated with the Project alternatives is provided in **Tables 2** and **3**. Details for the analyses are provided in Sections 3.15.6.4 and 3.15.6.5 of the Final EIS. Of these, there are 2 IRAs crossed by the Selected Alternative. The Chipman Creek (418008) IRA would be crossed for 2 miles in the Uinta NF, and the Cedar Knoll IRA would be crossed for 0.3 miles in the Manti-La Sal NF. Additional information regarding Project impacts can be found in the IRA worksheets contained in the Project Record.

TransWest has proposed special roadless construction methods within IRAs. These are outlined in the Project POD (Appendix D of the TransWest Draft and Final EISs) and include the use of helicopter construction techniques supported by minimal impact overland travel. Low-impact vehicles and equipment would be used for overland access and ground-based site work. "Drive and Crush" overland access would be employed whenever possible and no blade work would be performed to assist overland travel within the IRAs. TransWest is not proposing to build or maintain any new temporary or permanent roads across IRAs and there will be no addition of forest classified or temporary road miles for either construction or maintenance of the Project. Where existing NFS roads are available and open to motor vehicle use along the edge of IRAs, they could be used to access structure work areas in the TWE Project transmission line ROW. These system roads may need to be improved or widened depending on the condition of the road. However, existing roads will not be widened or otherwise upgraded for construction, as determined by the land management agency, where soils and vegetation are particularly sensitive to disturbance, except in areas where repairs are necessary to make existing roads passable and safe. Continued vegetation management and emergency repairs would be authorized at the discretion of the USFS and conducted in accordance with the POD and USFS stipulations. The USFS will review and approve the construction POD, which details construction techniques that include the specific protections for IRAs.

Construction disturbances immediately adjacent to this IRA would be generally limited to existing road use and associated construction supply siting. Following the completion of construction activities, any

disturbance that does occur will be re-contoured, topsoil replaced, and revegetated with vegetation consistent with USFS requirements and the Reclamation Plan. Routine maintenance would be via aircraft or low-impact vehicles such as vehicles with rubber treading, low pressure tires, or specialized mechanical movement to accommodate the terrain and landscape, and all-terrain vehicles, or by non-motorized methods (e.g., foot, horseback, or other non-motorized methods). Any emergent overland motorized access needs will be determined by the line officer on an as-needed basis. TransWest will work with the USFS to control the use of the ROW and prevent unauthorized travel along the ROW by off-road vehicles. Measures would be determined in consultation with the USFS and may include the following: 1) installing gates or other man-made physical barriers; 2) creating natural barriers (e.g., large boulders or debris); and 3) stockpiling trees cut for ROW clearing at barrier locations.

## 5.0 Environmentally Preferable Alternative

The environmentally preferable alternative is the alternative that, on balance, appears to best promote the national environmental policy in Section 101 of the NEPA. This is ordinarily the alternative that causes the least damage to the biological and physical environment and best protects, preserves, and enhances the historic, cultural, and natural resources (Question 6a, CEQ, Forty Most Asked Questions Concerning NEPA Regulations, March 23, 1981).

Identification of the environmentally preferable alternative involves some difficult judgments regarding tradeoffs between different natural and cultural impacts and values. This becomes more complex as the USFS considers the impacts to resources outside of NFS lands and beyond its mandated management jurisdiction. Based on a comparison of impact parameters involving ROW miles, road miles, and total disturbance on NFS lands, Alternative II-D would result in the lowest level of impacts to natural and cultural resources (**Table 4**) on NFS lands. The Selected Alternative ranked in the mid-range of potential impacts, based on the impact parameters. USFS NFS lands crossed by this Project comprise less than 6 percent of lands crossed by the entire Project. Accordingly, the USFS supports the BLM and Western in their identification of the selected alternative. The alternative selected by the BLM and Western does not represent the environmentally preferred alternative for USFS NFS lands.

Table 2 Region II: USFS Special Designated Areas within Areas of Potential Impact

		Alternative II-A	Alternative II-B	Alternative II-C	Alternative II-D	Alternative II-E	Alternative II-F	Alternative II-G
Nettoni		Align. (mi) / 250-ft ROW (ac)						
National	Special	Veg removal / constr. /	_	Veg removal / constr. /				
Forest	Designation Area	oper. disturb. (ac)						
IRAs								
Ashley	IRA 401009	NA	N/A	N/A	0/0	NA	0/0	NA
					<0.1 / <0.1 / 0		<0.1 / <0.1 / 0	
	IRA 401010	N/A	N/A	N/A	N/A	9 / 267 51 / 29 / 3	N/A	N/A
	IRA 401011	N/A	N/A	N/A	N/A	0 / <1 42 / 29 / 4	NA	N/A
Uinta 1	IRA 418008 (Chipman Creek)	2 / 72 21 / 14 / 4	N/A	N/A	N/A	N/A	N/A	2 / 72 21 / 14 / 4
	IRA 418017 (Tie Fork)	0 / 0 0/ <0.1 / 0	N/A	N/A	NA	0 / 0 0/ <0.1 / 0	0 / 0 0/ <0.1 / 0	0 / 0 0/ <0.1 / 0
	IRA 418009 (Willow Creek)	0/0 0/<0.1/0	N/A	N/A	NA	NA	NA	0 / 0 0 / <0.1 / 0
Manti-La Sal	Cedar Knoll	0.3/9 2/1/0	N/A	N/A	N/A	0.3/9 2/1/0	0.3 / 9 2/1/0	0.3/9 2/1/0
	Boulger-Black Canyon	N/A	0/0 0/1/1	N/A	N/A	N/A	N/A	N/A
	East Mountain	N/A	0/0 0/<1/0	N/A	N/A	N/A`	N/A	N/A

Table 3 Region III: USFS Special Designated Areas within Areas of Potential Impact

National Forest	Special Designation Area	Alternative III-A Align. (mi) / 250-ft ROW (ac) Veg removal / constr. / oper. disturb. (ac)	Alternative III-B Align. (mi) / 250-ft ROW (ac) Veg removal / constr. / oper. disturb. (ac)	Alternative III-C Align. (mi) / 250-ft ROW (ac) Veg removal / constr. / oper. disturb. (ac)	Alternative III-D Align. (mi) / 250-ft ROW (ac) Veg removal / constr. / oper. disturb. (ac)
Dixie National Forest	Mogotsu IRA	1 / 27 12 / 10 / 2	N/A	N/A	N/A
	Atchinson IRA	1/45 9/7/2	N/A	N/A	N/A
	Cove Mountain IRA	3/83 11/9/2	N/A	N/A	N/A

**Impact Parameters Alternative ROW Miles** Miles of New Roads<sup>1</sup> **Acres of Disturbance** II-A 19.0 29.0 276 II-B 17.2 24.5 243 II-C 34.0 45.3 463 II-D 8.1 13.1 124 II-E 19.3 29.7 286 II-F 9.0 15.7 143 19.0 II-G (Selected Alternative) 29.4 279 III-A 19.8 24.0 257

Table 4 Comparison of Impact Parameters on National Forest System Lands

Although the impact parameter comparison on NFS lands indicated Alternative II-D as the environmentally preferred alternative, the USFS supports the BLM's determination that Alternative II-G is the Selected Alternative. The BLM's selection was based on a broader scope that involved resource impacts throughout the entire Project area. The USFS has only one alternative for consideration in terms of coinciding with the BLM's Selected Alternative. Although the impact analysis for the Selected Alternative indicated that it would not result in the lowest level of impacts on NFS lands, the alternative still has the following merits:

- The Selected Alternative avoids or minimizes impacts to physical, biological, and cultural resource that are regulated by law (ESA, CWA, NHPA, ARPA, etc.);
- The Selected Alternative minimizes impacts to greater sage-grouse habitat;
- The Selected Alternative minimizes impacts to big game crucial winter range;
- The Selected Alternative avoids desert tortoise habitat in Utah, and minimizes impacts to desert tortoise in Nevada;
- The Selected Alternative avoids potential habitat for threatened and endangered plant species, including Uintah Basin hookless cactus;
- The Selected Alternative minimizes impacts to modeled potentially suitable clay phacelia habitat;
- The Selected Alternative minimizes impacts to the Overland Trail and Cherokee trail by crossing the trails at segments that are not eligible for the NRHP;
- The Selected Alternative minimizes impacts to important and sensitive cultural and historic
  resources in southwestern Utah by avoiding the crossings in and near the Dixie National Forest.
  The Dixie National Forest has the highest known and expected density of archaeological sites
  along the alternatives and includes three site of particular cultural importance: Mountain
  Meadows National Historic Landmark, Yellow-Springs cultural complex, and the Old Spanish
  Trail;
- The Selected Alternative avoids the Old Spanish Trail in the Moab and Price FOs; and

New road length is approximate based on the overall amount of access roads needed per alternative from the POD Access Road Methodology. The mileages are based on overall composition of the entire alternative rather than the specific topography or existing road networks on NFS lands. This decision does not approve any additional permanent roads on NFS lands; final temporary access routes will be determined though coordination with TransWest and the USFS implementation team and line officer prior to authorization of construction activities.

 The Selected Alternative avoids the San Rafael Swell (an area of high geologic and anthropologic importance), and avoids conflicts with significant cultural resources including the Quitchupah Creek area, which is considered sacred and traditional by the Paiute Tribe.

### 6.0 Statement of All Practicable Mitigation Adopted

As required in 40 CFR 1505.2(c), all practicable mitigation measures that are necessary to fully mitigate the potential effects of the Project according to federal laws, rules, policies, and regulations have been adopted by this ROD. Mitigation measures are discussed in Section 1.1.4 and listed in **Appendix F**, **Table F-1** of this ROD.

#### 7.0 Administrative Review

#### **Objection Opportunities**

This decision is subject to the objection process pursuant to 36 CFR 218 Subpart B.

#### **Eligibility to File Objections:**

Objections will be accepted only from those who have previously submitted specific written comments regarding the proposed Project or amendment either during scoping or other designated opportunity for public comment in accordance with 36 CFR 218.5(a). Issues raised in objections must be based on previously submitted timely, specific written comments regarding the proposed Project or amendment unless based on new information arising after designated opportunities.

Individual members of organizations must have submitted their own comments to meet the requirements of eligibility as an individual; objections received on behalf of an organization are considered as those of the organization only. If an objection is submitted on behalf of a number of individuals or organizations, each individual or organization listed must meet the eligibility requirement of having previously submitted comments on the Project or amendment (36 CFR 218.7). Names and addresses of objectors will become part of the public record.

#### Contents of an Objection:

Incorporation of documents by reference in the objection is permitted only as provided for at 36 CFR 218.8(b). Minimum content requirements of an objection identified in (36 CFR 218.8(d)) include:

- Objector's name and address with a telephone number if available; with signature or other verification of authorship supplied upon request;
- Identification of the lead objector when multiple names are listed, along with verification upon request;
- Name of project, name and title of the responsible official, national forest/ranger district of project,
- Sufficient narrative description of those aspects of the proposed project or amendment objected
  to; specific issues related to the project or amendment; how environmental law, regulation, or
  policy would be violated, and suggested remedies which would resolve the objection; and
- Statement demonstrating the connection between prior specific written comments on this project and the content of the objection, unless the objection issue arose after the designated opportunity(ies) for comment.

#### Filing an Objection

Written objections, including any attachments, must be sent via regular mail, fax, email, hand-delivery, or express delivery within 45 days following the publication date of the legal notice of Draft ROD in the Deseret News, the Richfield Reaper, the St. George Spectrum, the Salt Lake Tribune, the Sun Advocate, or the Vernal Express to: Objection Reviewing Officer, USDA-Forest Service Intermountain Region, 324 25th Street, Ogden, UT 84401. The Reviewing Officer is the Regional Forester of the Intermountain Region.

The office business hours for those submitting hand-delivered objections are: 8 a.m. to 4:30 p.m., Monday through Friday, excluding holidays. Electronic objections must be submitted in a format such as an email message, .pdf, plain text (.txt), rich text format (.rtf), or Word (.doc or .docx) to: <u>objections-intermtn-regional-office@fs.fed.us</u>. Faxed appeals should be sent to (801) 625-5277. Objectors are responsible for ensuring that their objection is received in a timely manner (36 CFR 218.9).

The publication date of the legal notice of Draft ROD in the *Salt Lake Tribune*, the *Deseret News*, or the *Sun Advocate*, which are the newspapers of record for the affected forests, is the exclusive means for calculating the time to file an objection of this draft decision. Persons wishing to object to this draft decision should not rely upon dates or timeframe information provided by any other source. Extensions of the objection period are not permitted (36 CFR 218.6).

When the objection filing period has ended and responses have been made to all objections by the reviewing officer, the responsible official may make a final decision on the proposed Project. The reviewing officer shall issue a written response to objectors within 45 days following the end of this objection-filing period (this response period may also be extended by the reviewing officer up to 30 days (36 CFR 218.26)).

## 8.0 Implementation Date

The USFS decisions will be implemented through signing of a final ROD and through issuance of a Special Use Permit as described above.

#### **Implementation Date**

If no objections are filed within the 45-day objection time period, implementation of the decision may occur on, but not before, the fifth business day following the end of the objection filing period, in accordance with 40 CFR 1506.10 (36 CFR 218.12(c) (2)). When an objection occurs, a decision can be signed as soon as the last objection response is made and any instructions identified by the reviewing officer are addressed.

### 9.0 Contact Person

Charles Kenton Call ckcall@fs.fed.us

## 10.0 Signature and Date

Chad E. Hudson	Date	
Deputy Forest Supervisor		
Uinta-Wasatch-Cache National Forest		

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